"OUT OF JOINT":

INDEPENDENT AIR FORCES IN DEMOCRATIC CULTURES

BY

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APPROVAL

The undersigned certify that this thesis meets masters-level standards of research, argumentation, and expression.

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

ABOUT THE AUTHOR

Wing Commander Stephen Edgeley joined the Royal Australian Air Force (RAAF) on 16 January 1987 as an Air Traffic Control Officer. The early part of his career was spent undertaking line controller and supervisory positions at various RAAF bases. Following this initial career training, he became a qualified Air Traffic Control Instructor and also taught on the Battlefield Air Operations Course. To gain joint experience he was then posted to the Australian Defence Force Warfare Centre to instruct on the joint planning process. He then returned to air traffic control duties to undertake flight commander and detachment commander responsibilities. He was then selected to attend UK Joint Command and Staff College, which was followed by a tour at Air Force Headquarters, in which he undertook several staff positions. His final tour prior to being selected to attend the School of Advanced Air and Space Studies, was as the Staff Officer to the Chief of Air Force. Wing Commander Edgeley also has various operational experiences having been deployed to Somalia, East Timor and Iraq.

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ABSTRACT

This study comprises an analysis of why independent air forces in democratic nations maintain a focus on the independent aspects of air power, rather than embracing jointness. The author describes how the civil-military relations within a democratic culture enable an independent air force to choose to what degree they comply with government direction and policy in particular, the government's policy and direction on the priority to be given to supporting joint operations. Next, the author describes why independent air forces maintain a focus on the independent aspects of air power. The author starts by explaining how historical influences created this autonomous focus and how concerns over organizational independence have allowed it to remain. This is followed by a description of how the budgetary process within democratic cultures encourages services to maintain an independent focus. The author then moves on to describe the organizational aspects of independent air forces which give rise to a tendency for them to maintain a narrow understanding of the application of air power. Coupling these historical, budgetary and organizational factors with the ability to choose, the author explains why independent air forces maintain a focus on the autonomous aspects of air power, which in turn, creates a perception that they are unwilling to become part of the joint team. The final section of the study includes proposals as to how this focus on the independent aspects of air power can be reduced, and how the wider application of every aspect of air power will allow air forces to become more joint.

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Introduction

In his article, "A Decade, No Progress", Douglas MacGregor suggests that in the ten years following the end of the first Gulf War, there had been no significant progress within US services to improve joint cooperation or capability. MacGregor suggests, in describing the reasons for this lack of progress, that "the unwavering faith of the Air Force that extended bombing could have won the Gulf War by air power alone, did not advance the cause of jointness in that service. Instead, Instant Thunder, the air operation against Iraq, simply became a model for the future. Strategic airlift took second place to the F-22, the post-war centerpiece of operations by the Air Force."[1] Like so many other authors, MacGregor suggests that the United States Air Force (USAF) has chosen not to embrace jointness, and has instead focused on those aspects of air power that allow it to conduct independent operations.

Background

This statement by MacGregor raises a number of very interesting avenues of thought. Since the introduction of the Goldwater-Nichols Department of Defense Reorganization Act in 1986, the focus of the United States' armed services was supposed to have been on improving "jointness". The Act was introduced because "modern warfare demanded the integration of air, land, and sea capabilities" and that without it the services would continue to fight to "preserve a high degree of separateness".[2] If this act was the political recognition of the importance of jointness, it is interesting to consider that the USAF might have some level of choice as to how much it embraces joint concepts. With the ratification of the act, the natural inclination would be to believe that because the US Government had made jointness compulsory, the USAF could no longer afford to choose to maintain an independent focus.

In, *Armed Servants,* Peter Feaver provides one possible explanation as to why military forces are still able to display a certain amount of independent choice in the decisions they make. Feaver's agency theory suggests that within

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[1] Douglas A. MacGregor, *"A Decade, No Progress" Joint Force Quarterly* (Winter 2000-01) 18-19.

[2] Dennis J. Quinn, ed., *The Goldwater-Nichols DOD Reorganization Act: A Ten-Year Retrospective* (Washington, D.C.: National Defense University Press, 1999), 17.

democratic cultures civil-military relations are a "strategic interaction between civilian principals and military agents."[3] Feaver postulates that the relationship between the government and the military can be compared to the economic relationship of the principal and the agent, a relationship in which the agent (in this case, the military) is able to choose how much it complies with the direction and desires of the principal (the government). Put simply, Feaver suggests that military services have some degree of choice in how much they comply with the direction of their government.

This suggestion of choice raises a second interesting question. If the USAF is able to choose to what degree it complies with the intent of the Goldwater-Nichols Act, why does it have a tendency to focus on those independent aspects of air power? Surely, the prudent thing to do would be to comply with the government's policy as closely as possible, to ensure that the service remains in the "good books" and is looked upon favorably during funding negotiations. If the service is choosing to steer away from this sensible course of action, it is extremely important to gain an understanding of why. To advocate a service strategy that doesn't focus on jointness is a dangerous path, so what are the perceived benefits that the USAF believes it is receiving for taking this risk.

Another important aspect of Feaver's theory, that explains why the USAF has the ability to choose how much it embraces jointness, is directly related to democratic culture. Therefore, it would be interesting to determine if independent air forces, from other democratic cultures, have also made the same choice. If other independent air forces from democratic nations also demonstrate a tendency to emphasize the independent aspects of air power, we might achieve a greater understanding of why they choose to maintain this focus.

Research Question

To explore the issues created by MacGregor's statement, this thesis will ask: *why, in democratic cultures, do independent air forces choose not to embrace jointness?* This is a complicated question that can best be answered by

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[3] Peter D. Feaver, *Armed Servants; Agency, Oversight and Civil-Military Relations* (Cambridge, MA: Harvard University Press, 2005), 2.

breaking it down into the following two sub-questions. Firstly, *does democratic culture provide independent air forces with the ability to choose the direction they follow,* and secondly, *why do independent air forces choose not to embrace jointness?* The weighting provided to each of these questions within the thesis will not be equal. Though it is important to discuss why democratic culture provides the ability for independent air forces to choose, that question is not as important as explaining why air forces make the choices they do. The reason for this is that democratic culture should not be considered as a direct cause of the independent air force's tendency to steer away from jointness. It should only be considered as an enabler. Therefore, the vast majority of this paper will concern itself with answering the second question, focusing on why air forces choose independent aspects of air power over jointness.

The purpose of answering these two sub-questions will be to prove the main thesis of this paper, which is, that in democratic culture, independent air forces have the ability to choose to what degree they embrace joint concepts. This choice is heavily affected by a focus on the autonomous aspects of air power, created by historical, budgetary, and cultural factors, which make it less likely that independent air forces will willingly embrace jointness.

This study will benefit from comparing the actions of a number of air forces from democratic nations. Therefore, where possible, this study will provide examples of institutional behavior from three independent air forces: the USAF, the Royal Air Force (RAF), and the Royal Australian Air Force (RAAF). The purpose of this comparison is to provide further explanation of why independent air forces struggle to embrace joint concepts. Demonstrating a similar tendency between all three air forces will potentially provide a greater insight into why the propensity exists.

Limitations

Though this paper will be comparing the actions of three independent air forces to demonstrate a trend in their behavior, it would be extremely disingenuous to suggest that the organizational learning experienced by one of the three air forces was not immediately shared with the others. There is a very long history of coordination and information transfer between each of the three air forces under study. In, *The Great War in the Air*, John Morrow describes

how one of the United States' strongest air power advocates, General Billy Mitchell, learned the importance of strategic bombardment and unified air command whilst observing the actions of Sir Hugh Trenchard in World War I.[4] In turn, Mitchell often cited statements from Trenchard when arguing for the independence of his service.[5] One of the most striking examples of the cross-pollination of ideas can be seen post World War II, when the RAAF endorsed General 'Hap' Arnold's article, "Air Power and the Future,"
 as its official air power doctrine.[6] Also, many of the historical influences that most shaped their understanding were shared experiences. All three air forces participated, to varying degrees, in World War I and II; the USAF and RAF shared, though in different circumstances, the experience of becoming the country's primary nuclear deterrent; and, the RAAF shared small war experiences with both the RAF and USAF. It can therefore be seen that even though individual national policies shaped the size and primary roles of each of the three air forces, they were able to create a shared understanding on the role of air power and used each other's successes to further independent causes.

This "bond of airmen" leads directly to another major concern associated with the ability to objectively study the three independent air forces selected. That concern is primarily focused on the pre-eminence of the USAF in formulating an understanding of modern air power. The size of each of the air forces demonstrates quantitatively the enormity of the imbalance. The USAF comprises 327,452 active duty members and 5,573 aircraft in its inventory[7]. In stark comparison the RAF has 40,830 members (13% of USAF strength) on active duty and 1,308 aircraft (24% of USAF strength).[8] The RAAF has only

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[4] John H. Morrow, *The Great War in the Air: Military Aviation from 1909 to 1921* (Tuscaloosa, AL: The University of Alabama Press, 1993), 271.

[5] Earl R. McClendon, *The Question of Autonomy for the United States Air Arm, 1907-1945* (Maxwell Air Force Base, AL: Air University, 1954), 53.

[6] Alan Stephens, *Going Solo: The Royal Australian Air Force, 1946-1971* (Canberra, ACT: Australian Government Publishing Service, 1995), 36.

[7] 2009 USAF Almanac, "The Air Force in Facts and Figures," http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

[8] The Management of Defence, "Defence Personnel Totals," http://www.armedforces.co.uk/mod/listings/l0013.html, and World Air Forces, "United Kingdom Air Force," http://www.aeroflight.co.uk/waf/uk/raf/ukaf-raf-current-inventory.htm.

14,010 members (0.05% of USAF strength) on active duty and 302 aircraft (0.06% of USAF strength).[9]

Though comparing force sizes is a good indication of the imbalance being discussed, it doesn't really explain why the USAF's influence is so pervasive within the RAF and RAAF. One of the primary reasons that the USAF has such a dominant role in creating a shared understanding of modern air power doctrine is because the US has been the lead nation for every major air operation in the last 20 years. The last independent air operation the RAF conducted was during the Falklands War in 1982, and the RAAF's last independent air operation was East Timor in 1998, and even that was an extremely limited operation in terms of aircraft numbers and missions.[10] This means that the vast majority of recent operational experience in planning and controlling major air operations has been completed in the "American Way". Both the RAF and RAAF have deployed limited air assets to most of the major air operations since Desert Storm in 2001, but these assets have always been employed using the American Air Component and Air Operations Center constructs. The primary method by which the RAF and RAAF gain command experience in the conduct air operations is through their highly-valued rotations as Director of the Central Commands (CENTCOM) Combined Air Operations Centre (CAOC). The RAF's and RAAF's understanding of how air operations should be conducted comes from their operational experience with the USAF. If you learn through experience, both the RAF's and RAAF's understanding of air operations comes from attaining practical experience within the USAF's doctrinal concepts. While there are other ways of conducting air operations, for the last twenty years the USAF's approach has been the only one operationally tested.

Another reason why the USAF maintains its pre-eminent position is directly related to the intellectual momentum that it creates on the majority of subjects associated with air power. The size of USAF, and the US military in

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[9] ADF Defence Portfolio Budget Statements 2009/10, http://www.defence.gov.au/budget/09-10/pbs/2009-2010_Defence_PBS_03_department.pdf.

[10] The RAAF's operations in East Timor were predominately limited to C130 inter-theatre and CC08 intra-theatre transport moves. The only other significant air presence was provided by a small number of Australian Army Blackhawk helicopters.

general, allows it to apportion a large amount of resources towards the academic study of air power. The vast majority of academic material available on the subject of the application of air power is American. The USAF's Air University construct, that contains multiple colleges and schools designed to further the academic understanding of air power, completely dwarfs the resources that the RAF and RAAF are able to apportion for this venture.[11] Michael Hobkirk describes another important factor associated with this trend when he suggests that US military culture encourages the open debate of military issues between the various services and government.[12] This encouragement leads to a great deal of candid debate within the printed media and is in contrast to the amount of debate that occurs in the United Kingdom and Australia. The ultimate outcome of all of this academic momentum is that the large majority of information available on air power and the actions of air forces tend to be squarely focused on the USAF.

As a direct result of this pre-eminent position of the USAF in both air power doctrine and academic study, at times this paper becomes unavoidably focused on the USAF. Though care has been taken to provide as many examples as possible from the RAF and RAAF, when the study turns to theoretical understandings of air power and air force culture it is difficult to provide a balanced multi-national view. Though this should be registered as a concern, the author is confident that the "bond of airmen" provides the necessary level of adhesion required to provide an overall assessment of all three independent air forces.

Methodology

To begin this study, Chapter one will commence by framing the problem. If there is a perception that independent air forces do not embrace jointness, it is important to understand where these criticisms come from, and whether they are criticisms exclusively pertaining to independent air forces. Chapter 1 will then move on to provide an answer to the first of this study's sub-questions:

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[11] The RAF and RAAF both have a single centre for the study of the application of air power. The RAF has the Centre for Air Power Studies, and the RAAF has the Air Power Development Centre.

[12] Michael D. Hobkirk, *The Politics of Defence Budgeting: A study of Organisation and Resource Allocation in the United Kingdom and the United States* (Washington, D.C.: National Defense University Press, 1983), 59-61.

does democratic culture provide independent air forces with the ability to choose what direction they follow? A review of Peter Feaver's agency theory will provide a theoretical foundation for understanding why, within democratic cultures, armed services are able to choose how much they comply with the direction and intent of the government.

The study will then move on to its main focus and answer the second sub-question: *why do independent air forces choose not to embrace jointness?* To answer this question the study will demonstrate how the creation of an institutional focus on the independent aspects of air power has made it difficult for the three air forces being studied to willingly embrace jointness. To fully explain the creation of this independent focus, this study will provide an in-depth look at each of the three major causes. One inheres in being the 'third child'; another derives from the budgetary and force structure processes in democratic nations; yet a third involves self image and the perceived trajectory of the strategic environment. Each of the following chapters will discuss one of these causal factors, and will describe how each factor is created and what forms of behavior it generates within the air forces.

The "third child" reference best describes the residual organizational issues created during the formation of air forces. The RAF, RAAF and USAF were all established after their respective national armies and navies. All of them share the common bond of being created through intense inter-service rivalry and having to survive their formative years under heavy threat from the other services. Chapter two will present a micro-history of each of the three air forces to highlight the similarity of their formation and to discuss prominent features throughout their history which have added to their organizational pathology. While the history of each of the air forces will be presented separately, it is important to remember the effects of the "bond of airmen", at all times the reader must be aware that each of these air forces share a complex relationship and tend to mirror each other's thoughts and actions. The chapter will also introduce the concept of the "justification cycle", an internal and external process that continuously requires that independent air forces demonstrate their ability to do more than participate in the joint battle.

Chapter three will highlight those aspects of democratic societies that require all services within Defense to compete with each other. In particular the chapter will focus on the budgetary and force-structure-selection processes that exist in the United Kingdom, Australia, and the United States. [13] Each of these countries has similar, yet distinct, processes for completing each of these tasks. One of the main differences between each of the countries is the level of political activity experienced during budgetary negotiations and force-structure review. The purpose of this chapter will be to highlight how the politicization of these processes reinforces the tendency of independent air forces to focus on individual-service capabilities and the independent aspects of air power. By comparing the three countries budgetary and force-structure review processes the chapter will demonstrate a direct linkage between politicization and fervent independent focus and rhetoric.

Each of the three armed services that make up Defense has a specific service culture that has been created by history, service structure and underlying values. Chapter four will look at those aspects of specific air force culture that help to create the focus on independent aspects of air power. The historical factors will have been covered in chapter one, so this chapter will concentrate on structural issues and the self image of air forces. One of the main discussions will be on the tribalism that exists within the leadership of independent air forces, and how this tribalism has a tendency to create a narrow focus on the main effort of the tribe. Directly related to the narrow focus created by tribalism is an explanation of how the air force has a unique view of technology, and how this view further adds to a tendency to focus on independent capabilities.

The penultimate chapter of this study will discuss the "joint dilemma" that independent air forces face when attempting to determine how joint they should become. The chapter will describe how the legacy of the "true believers" of air power can still be found in the genetic make-up of today's independent air forces, and how that legacy makes it difficult for them to truly embrace joint concepts. This chapter will summarize the information from the previous

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[13] The force selection process is referred to as the 'White Paper process" in the United Kingdom and Australia, and is known as the "Quadrennial Defense Review" in the United States.

chapters and attempt to distill the problem that independent air forces face today.

The concluding chapter will suggest how this unwillingness to embrace joint concepts can be treated within air forces. Can air forces continue in their current manner, or will their behavior eventually become self-defeating? Will air forces be able to ride out the current period of uncertainty and wait for the next big thing in air power to increase their relevance? The final chapter will attempt to answer these questions and provide some concrete suggestions as to what independent air forces need to do to reduce their focus on the independent aspects of air power.

Chapter 1

Making a Choice: Independence versus Jointness

A democracy which makes or even effectively prepares for modern, scientific war must necessarily cease to be democratic. No country can be well prepared for modern war unless it is governed by a tyrant, at the head of a highly trained and perfectly obedient bureaucracy.

Aldous Huxley

"Jointness" is a concept that constantly defies adequate definition and tends to mean different things to different people. Therefore, if the independent air forces are being accused of not being "joint", it is extremely important to gain an understanding of what that criticism actually entails. In, "The Limits of Jointness", Seth Cropsey explains how the term jointness is generally recognized within the military as the process by which greater cooperation is created between the services, but that it has a completely different meaning to those within the government, who see jointness as the elimination of redundant weapons systems or overlapping missions and roles. Even the famous United States' Goldwater-Nichols Act doesn't contain a definition of jointness, but does suggest that inter-service rivalry is an obstacle to it.[1] Though Cropsey suggests that there is a military understanding of jointness, no official definition for the term exists in either the US, British or Australian defense doctrine. This suggests that the concept of jointness within the military may only exist as a tacit agreement between the services and the government.

Perhaps the most useful way to understand jointness within the military is to consider it as a way of thinking. It has become an overarching principle that permeates every aspect of the military's operations. For the military to think joint, its primary concern must be the effective integration of the combat capabilities within the services.[2] Jointness has become a mantra often touted within the defense forces of the US, Britain, and Australia. To fight joint, is to focus on the joint battle and to ensure that all of your services capabilities are

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[1] Seth Cropsey, "The Limits of Jointness," *Joint Force Quarterly*, Summer 1993, 72.
[2] Don M. Snider, "Jointness, Defense Transformation, and the Need for a New Joint Warfare Profession," *Parameters*, Autumn 2003, 17.

provided to enhance those supplied by the other services. This understanding of jointness, the idea that it is a cooperative effort, is where the fundamental criticism of independent air forces finds it genesis. Maintaining any form of independent focus is immediately criticized within the joint construct, and the perpetrator is immediately accused of not being joint. Independent air forces are often criticized for maintaining a focus on the autonomous aspects of air power, and therefore, stand accused of not embracing jointness.

A Lack of Jointness

There are two major criticisms leveled at independent air forces that are normally equated to them maintaining a focus on the independent aspects of air power. These can probably best be described in this critique:

> ….the Air Force certainly has a serious problem that they do not wish to address. They are not part of the present fight and have been working to marginalize themselves since before Vietnam when they decided that strategic air power was their stock in trade and that support to ground forces was beneath their dignity. They paid it lip service for years, failed to develop the airplanes, weapons systems, and command and control construct necessary to fight in a ground centric environment. Their inflexible ATO process ensures that ground commanders will not have the air support that they need when they need it. The Air Force doesn't care. … Arrogance is a hard habit to break and if the Air Force doesn't break it, they will find themselves in a fix, and the country will be harmed as well.

<div align="right">Anonymous Retired Army Colonel</div>

In relation to their support of joint activities, the primary criticisms are predictable: air forces don't allocate enough resources to aircraft undertaking joint roles, and they maintain a command-and-control hierarchy whose primary focus is on independent air force missions, which makes the air force unresponsive to other services needs.

Allocation of Resources

This criticism asserts that independent air forces allocate too few resources to those aspects of air power that provide support to other services, in favor of those aspects of air power that fashion an independent role. James Burton suggests that "since the Key West Agreement, the air force [USAF] has considered the close air support mission its lowest priority. It has been

reluctant to commit a significant portion of its budget to this mission."[3] Alan
Stephens suggests that the RAAF is open to the same criticism: "...the politics
of inter-service relations made it vital for the RAAF to give the Army high-quality
support, even if the pilots found such tasks as resupply and reconnaissance
prosaic. Too often that support was provided grudgingly, sometimes not all."[4]
Stephens suggests that this attitude was short-sighted and created by a
"tendency for airmen to focus on the 'war winning' components of their
business."[5] Bruce McQuain and Dale Franks suggest that close air support
(CAS) "is not a mission it [the USAF] wants, particularly. But it is a mission it
does because, more than its desire *not* to do it, is its desire not to let the Army
do it with fixed wing aircraft." They go on to say that "this is not really an
America-centric problem either. Most other countries that maintain an
independent air force also make CAS an air force responsibility. And, in
general, they also suffer from the same lack of joint training, and Army
dissatisfaction with the CAS arrangement."[6]

Centralized Command and Control

Many criticisms emanate from the independent air force's policy of
centralized command and decentralized execution. One of the largest, and
definitely the most controversial, criticisms of independent air forces is that
they hold the command of air assets at too high of a level. Major Timothy
Missler, a United States Marine Aviator, suggests that the construct of the Joint
Force Air Component Commander (JFACC) and Air Operations Centre (AOC) is
one of the primary reasons why the other services don't consider air forces joint
players. Missler states that "by removing the majority of airmen from the staffs
of ground units to a geographically isolated AOC far removed from the
integrated planning process, the USAF has effectively validated the perception
of the ground component that the USAF is not part of the joint team. In
essence, by voluntarily removing itself, the USAF has essentially transformed
the JTFs in both Iraq and Afghanistan into land component commands vice

[3] James G. Burton, *The Pentagon Wars: Reformers Challenge the Old Guard* (Annapolis,
Maryland: Naval Institute Press, 1993), 22.
[4] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 313.
[5] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 313.
[6] Bruce McQuain, Dale Franks, "Abolish the Air Force? II," The QandO Blog, 01
November 2007, http://www.qando.net/details.aspx?entry=7180.

joint air-ground commands."[7] This argument suggests that the AOC construct that has been adopted by the USAF, RAF, and RAAF is purposely designed to focus on the independent capabilities of air power and does not provide the flexibility required to support the other services in an effective manner.

There are myriad historical, operational, and doctrinal reasons why independent air forces insist on holding the control of air assets at such a high level, many of which are valid. The current concern stems from the fact that the JFACC and AOC construct was designed to operate in a large conventional fight. Missler's point is that with a change in the type of war being fought, where the most effective method of applying air power is to closely integrate it with the ground scheme of maneuver, the air force still resists any attempt to diversify the control of air assets to a lower level. In other words the primary criticism is that independent air forces have chosen to maintain a command-and-control construct that is more suited for fighting a large conventional war, within which the air force could undertake independent missions, rather than re-design the construct to enable it to better focus on providing support to the other services.

Within the criticism of the air force's AOC construct is another issue that stems from the air force's insistence that the JFACC should prioritize the use of limited air assets. The issue is best described in the following manner:

> ....a JFACC was created with inter-service agreement to govern the air war over both Kuwait and Iraq. But JFACC was in the hands of the Air Force and reflected that service's cultural biases. It believed in centralized control of air power and attacks against only the targets planners believed critical to the overall campaign. These views did not necessarily comport with those of other services. The Army, with only attack helicopters for air support, complained that its sister service was ignoring its needs. The Marine Corps, also unhappy with Air Force control of the air war, but with its own air arm, simply subverted the Air Force-dominated joint system.
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> <div align="right">Bernard Trainor</div>

Independent air forces are also criticized for spending too much time fighting their own war and not focusing enough on the joint war. Patrick Pentland suggests that "air warriors feel strongly that air forces fight at the operational

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[7] Major Timothy B. Missler, "The Theater JFACC Construct, Creating Disunity of Command in the CENTCOM AOR," (Maxwell AFB, AL: Air Command and Staff College, 2009), 3.

level of war and fear most a situation where they "just service target lists at the tactical level."[8] The criticism being leveled at independent air forces is that they purposely decide to concentrate on those targets that allow them to undertake independent action, rather than selecting a target set that would place them in a more supporting role.

These two major criticisms imply that air forces choose to concentrate on the independent aspects of air power rather than providing the necessary resources to support the other services. If independent air forces were given the appropriate resources to undertake all of the aspects of air power to the same degree, perhaps there wouldn't be as much of a problem. The issue comes from having to make the choice; limited resources mean that air forces have to prioritize which aspects of air power they fund. Why the three air forces being studied tend to focus on the independent aspects of air power is a question that will be answered in the remainder of the paper. For now, there are two important takeaways: that the independent air forces' perceived lack of jointness is directly related to an alleged focus on the independent aspects of air power, and, that this focus is a matter of choice. This apparent ability to choose leads directly to the first sub-question of this thesis: *does democratic culture provide independent air forces with the ability to choose the direction they follow*?

The Ability to Choose

One of the key tenets of democratic culture is the subordination of the military to the direction of its civilian masters. "For democracy, civilian control, that is, control of the military by civilian officials elected by the people, is fundamental. Civilian control allows a nation to base its values and purposes, its institutions and practices, on the popular will rather than on the choices of military leaders."[9] If this subordination is so fundamental to the workings of a democracy, it is interesting to consider that services within the military have the ability to choose to what degree they comply with the direction of the civilian government. Jointness is a declared policy of the Governments of the

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[8] Patrick A. Pentland, "Close Air Support: A Warfighting View," *Armed Forces Journal International*, September 1988, 94.

[9] Richard H. Kohn, "An Essay on Civilian Control of the Military," *American Diplomacy*, 1997, http://www.unc.edu/depts/diplomat/AD_Issues/amdipl_3/kohn.html.

US, Britain, and Australia. The US policy is clearly stipulated in the Goldwater-Nichols Act, and both the British and Australian governments have made specific reference to the requirement for jointness in their respective Strategic Defence Reviews or Defence White Papers.[10] If jointness is a declared policy, what is it about democratic culture that allows the military services some discretion in the degree they comply with that direction?

Samuel P. Huntingdon is considered one of the classic writers on civilian-military relations. In *The Soldier and the State*, he provides a theoretical framework to consider civil-military relations.[11] His civil-military relations theory suggests that there are two primary methods by which the civilian government controls the actions of the military. The first is subjective military control, which is achieved by "maximizing the power of civilian groups in relation to the military."[12] The second is objective military control, which is achieved when "the distribution of political power between military and civilian groups is conducive to the emergence of professional attitudes and behavior among the members of the officer corps."[13] Huntingdon's theory suggests that there is a dynamic relationship between the military and the civilian government which is effected by the distribution of power, the professionalism of the military, and the ideology of society. Huntingdon's overall theory provides a great deal of information on the larger themes of keeping the military as a tool of the government (macro-level), but it doesn't really provide much insight into compliance with specific governmental policies (micro-level). Huntingdon does give some thought to these micro-level issues though when he suggests that "the military budget is the single most important annual contract

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[10] Australian Government Department of Defence, "Defence White Paper", http://www.defence.gov.au/whitepaper/mr/index.htm and, Secretary of State for Defence, "Strategic Defence Review", http://merln.ndu.edu/whitepapers/UnitedKingdom1998.pdf.

[11] Samuel P. Huntingdon, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: The Belknap Press and Harvard University Press, 1957), vii.

[12] Huntingdon, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, 80.

[13] Huntingdon, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, 83.

between the military and the government."[14] Huntingdon believes that this is the one method by which the government can affect military policy issues, but because of inter-party politics, budget discussions normally end up concentrating on matters of administrative detail.[15]

In *Armed Servants,* Peter Feaver is able to amplify the idea that the government has the opportunity to control the military at the micro-level but elects to monitor them from a distance. Feaver, using economic agency theory, provides an excellent explanation of how military services are capable of deciding how much they comply with government direction. Feaver suggests that the relationship between the military and the government is an asymmetrical one based on the principal-agent problem, where the government (the principal) does not have perfect knowledge of, and is unable to monitor the behavior of the military (the agent). Feaver believes that this principal-agent relationship gives the military the opportunity to decide whether it should be "working" or "shirking". Working implies that the military is abiding with the government's intent and is described as "the ideal conduct that the agent would perform if the principal had full knowledge of what the agent could do and was in fact doing."[16] Shirking describes the ability of the military to decide to what degree it complies with the government's direction "in order to pursue different preferences, for instance by not doing what the civilians requested, or not in the way the civilians wanted."[17]

Under Feaver's model, the government decides to what level it will monitor the activity of the military. As Huntingdon suggests, one of the only methods the government has to do this effectively is during the budgetary process, and for political reasons, this is rarely the case. Once this level of monitoring has been established, the military decides to what degree it will work or shirk the specific governmental intent. The military makes a calculation based on how much it desires to deviate from the guidance and the level of punishment involved if shirking is detected. Basically, the services will

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[14] Huntingdon, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, 407.
[15] Huntingdon, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, 409.
[16] Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations*, 61.
[17] Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations*, 68.

make a risk calculation based on the importance of the issue and the likelihood and severity of the consequences if they get caught not complying.

For the independent air forces, jointness is one of those governmental policies they must decide to what degree they work or shirk. In accordance with Feaver's model, this decision will be based on how much the deviation means to them, and the expected repercussions of their actions. As the remainder of this paper will demonstrate, the three air forces being studied continue to place a great deal of importance and focus on the independent aspects of air power and will therefore highly value the ability to deviate from the government's stated policy on jointness. In a democratic culture, the government has only limited levers available to punish a service that is not complying with its policies. The primary lever is control over the service's budget, but Chapter three will demonstrate that this is an ineffective lever because of intervening political factors in the budget process. Therefore, the independent air forces maintain some ability to shirk on the policy of jointness.

This shirking calculation is not only completed at the military-civilian level of governance. It should also be recognized that by choosing to shirk on jointness, the independent air forces are making the same calculation in relation to their standing with the joint chief of the defense force. Each of the three countries being studied also has a joint chief that is responsible to the government for the provision of a joint defense force. Therefore, a decision to shirk on jointness also has to take into account the potential consequences of the joint chief gaining a negative perception. The degree to which the joint chief controls the individual services' budgets will be a major factor in deciding what level of risk is acceptable.

Feaver's model frames the answer to the first sub-question of this thesis: *does democratic culture provide independent air forces with the ability to choose what direction they follow*? The answer is "yes". Democratic culture provides the ability for the independent air forces to determine to what degree they can choose to follow governmental direction. The inability of the democratic government to effectively monitor or punish their shirking provides the independent air forces leeway to choose the degree they follow government policy and intent.

Summary

To cure the perceived ills of an uncoordinated and poorly integrated defense force, the governments of the United States, Britain and, Australia mandated the requirement for the armed services to become more joint. What they meant by that direction is open to many interpretations, but one of the most succinct ways to understand jointness is to consider it as a way of thinking. To be joint is to consider your service as a smaller part of a larger whole. Within this construct there is little tolerance for maintaining any form of independent focus. Independent air forces stand accused of not being joint because it is perceived that they display a focus on the independent aspects of air power. This criticism stems from a belief that they allocate more resources towards independent missions and maintain a command-and-control system whose primary focus is to support those particular missions.

In a democratic culture, the traditional relationship between the military and the government does not allow the civilian masters to closely monitor the adherence to policy by particular services. This lack of close supervision, coupled with an inherent inability to punish transgressors, provides the services the "breathing space" required to enable them to choose to what degree they comply with the government's intent that they embrace jointness. If the air forces have a choice, the question becomes: *why do independent air forces choose not to embrace jointness?* This question will become the focus of the remainder of the study.

Chapter 2

The Third Child

Nothing is comprehensible, except through its history.

Teilhard de Chardin

To be able to comprehend some of the more complex organizational issues they face, it is important to understand the effect that historical influences have had, and continue to have, on independent air forces. This chapter will highlight those significant historical events which have molded the beliefs, attitudes and anxieties of our three independent air forces. The histories presented are not complete; and this paper will move slowly at first to enable a detailed explanation of the creation of each of the air forces; but it will then move more quickly through almost a century of history, briefly pausing at those important milestones which add to a more comprehensive understanding of the psyche of independence. The major milestones will include the creation of each air force, the effect of World War II, the rise of nuclear deterrence, the contribution of air power during small wars, and finally, the lasting effects of the first Gulf War. This review of history will demonstrate that the three geographically disparate air forces all have experienced similar historical influences, which in turn, mold a surprisingly common and shared organizational understanding. The purpose of this review is to describe the major historical influences that have led to the creation of an institutional focus on the independent aspects of air power.

A Conflicted Beginning

United States of America

The first official act associated with military aviation within the United States was the creation of an Aeronautical Division within the US Army's Signals Corps in August 1907. This was quickly followed by the purchase of the first military balloon in spring of that year and the first military aircraft in 1909. Over the following years, public discussion by aviation enthusiasts steadily increased the pressure on military and political leaders to officially

recognize the growing importance of military aviation. In response to this pressure and reacting to a recommendation from the Chief Signals Officer, Congress passed a bill in July 1914 which gave statutory recognition to the air service as the Aviation Section of the Signals Corps.[1] Aviators found considerable support among certain air-minded organizations, such as the Aero Club of America and its affiliate groups, as well as numerous individuals, including some members of Congress. The net result was the beginning of a concerted movement to separate the Aviation Section from the Signals Corps.[2]

Perhaps the slow political progress in increasing the importance of military aviation would have continued, if disturbing events in Europe hadn't intervened. In a speech on 17 April 1916, the Secretary of War, Newton Baker, was quoted as saying "although theretofore the military air arm had been regarded as a purely auxiliary service for scouting, carrying messages, and to a limited extent controlling gunfire, experiences in the European War had shown that it could serve effectively on the offensive as well. In the near future, he predicted, the United States would likely add armored, armed airplanes and other fighting craft to its air fleet. In such case a new organization must be created to handle this new fighting arm in order that its work might be coordinated with the other service forces. Therefore, the time had come when it would be wise to consider changing the relations of the Aviation Section to the Army."[3] This speech is extremely important because it draws a direct correlation between the ability of the Air Service to undertake offensive action and the increasing need for autonomy. This correlation would become, and remains, one of the major justifications for an independent air force.

Unfortunately, for members of the Aviation Section, Secretary Baker's speech was not followed up with any immediate action. The only action taken in the subsequent years was that Congress approved legislation that created the Aircraft Board in October 1917 and announced the creation of Director of Air Service in August 1918. The Director would also have the dual role of being the Second Assistant Secretary of War. This unprecedented move gave aviation greater recognition in the council of the Secretary of War, and demonstrated the

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[1] McClendon, *The Question of Autonomy for the United States Air Arm, 1907-1945*, 22.
[2] McClendon, *The Question of Autonomy for the United States Air Arm, 1907-1945*, 23.
[3] "Army Aero Service Shakeup Started," *New York Times*, 18 April 1916.

growing prestige of military aviation.[4] The momentum this appointment created could have possibly led to the creation of a separate department for air if events in Europe had not once again intervened. When the armistice was signed on 11 November 1918, all of the political momentum that military aviation had achieved was lost; independence would have to wait.

David E. Johnson describes the interwar period as a time when "US Army airmen fought to establish air power as the decisive instrument and to gain their independence from what they considered a conservative Army hierarchy that was incapable of realizing the potential of air power as anything other than long range artillery relegated to supporting the ground effort."[5] This period of time is best known because of the activities of the infamous Billy Mitchell. The basic arguments put forward by those in favor of an independent air force included: there were military missions for the air arm independent of the surface forces; the airplane had an almost unlimited potential as a weapon; the full power of the airplane could be reached only by an air arm controlled by men with knowledge and interest in aviation; the leadership of the Army lacked interest and knowledge in aviation and had subordinated the needs of the air arm to those of other combat arms; a separate air service would prevent expensive duplication by concentrating the government's aviation activities under central control; and finally, such an independent air service had been successful in Britain.[6] The counter argument was that the air arm could not win wars, and to separate it from Army control would reduce the effectiveness of the Army, which could win wars.[7] Mitchell was determined to bring the aviators' point of view to the public and to Congress. Mitchell was a true believer, a zealot, who didn't understand that fundamental change within the military has to be done with a light political touch. Mitchell pushed his extreme ideas at every opportunity: at military boards such as the Menoher Board; at congressional hearings where he was requested to give testimony; in his writings such as *Our Air Force* and *Winged Defense*; by creating so much

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[4] McClendon, *The Question of Autonomy for the United States Air Arm, 1907-1945*, 12.
[5] David E. Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era* (Santa Monica, CA: RAND Corporation, 2006), 9.
[6] James P. Tate, *The Army and its Air Corps: Army Policy toward Aviation, 1919-1941* (Maxwell Air Force base, AL: Air University Press, 1998), 12.
[7] Tate, *The Army and its Air Corps: Army Policy toward Aviation, 1919-1941*, 10.

political pressure on the Navy that it had to agree to tests such as the bombing of the captured German dreadnought *Ostfiresland*; and finally, in a series of articles in the *Saturday Evening Post*. Mitchell would ultimately pay for his zealotry; he didn't receive a reappointment as the assistant chief of the air service, and in 1925 was found guilty at court martial for conduct prejudicial to military discipline and of a nature likely to bring discredit upon the military service. The role of the air power zealot, epitomized by Mitchell, will be discussed in a later chapter of this paper.

Arguments among aviators and the establishment were not the only activity during this period; the status of the air service was one of the most continuously debated topics in Washington in the 1920s. A series of boards incrementally increased the importance of aviation within the military organization. The Morrow Board resulted in the introduction of the Air Corps Act on 2 July 1926; this act renamed the Air Service to the Air Corps and placed a major general in charge of the organization. The next major step on the road towards an independent air force within the US occurred as a result of the tragedy that was known as the air mail fiasco.[8] The result of the fiasco was the appointment of the Baker Board on the 17 April 1934. As a result of the Baker Board's concern over the ability of the Air Corps to operate independently, it recommended the creation of a General Headquarters (GHQ) Air Force. The GHQ Air Force would become the operational headquarters of the Air Corps and basically meant that the air service was split in two. The Air Corps would be responsible for raising the required forces. In turn, those forces would then be transferred to GHQ Air Force for operations.

The final step towards an independent air force taken before World War II harks back to the military build-up prior to the First World War. Once again reports from Europe convinced the US government that a larger and more capable air force would be required. In direct response to the disturbing reports coming from the American Ambassador in Berlin about the size of the Luftwaffe and the production capacity of the German aircraft industry, the President,

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[8] In 1934, in response to suggestion that fraud and collusion has been involved in the creation of civil mail contracts, the Postmaster General cancelled the contracts. President Roosevelt ordered the Air Corps, after receiving advice that they were capable of conducting the task, to transport mail over vital routes. The Air Corps was not ready or trained for this eventuality, and in a three week period lost ten lives.

through Congress, authorized a massive increase in the size of the Army Air Corps. The War Department initiated a "balanced" program to increase the Air Corps strength by 3,251 (total of 5,500) planes, 1689 (total of 3,203) officers and 29,000 (total 45,000) enlisted men. Obviously, the invasion of Poland and the commencement of World War II on 1 September 1939 further increased the intensity of wartime preparations. More important for the future of the Air Corps were the reports that Poland had "died on its air fields." There was little doubt now among war planners about the effectiveness and importance of air power.[9] With the rapid increase in the size of the Air Corps, the current arrangement of splitting air units between the Air Corps and GHQ Air Force was becoming unmanageable. Added to this were the problems associated of having Air Corp stations falling under the direct control of the respective Corp Area Commanders. All of this meant that rapid mobilization was being hampered by a multitude of command chains. The solution was to create a virtually autonomous air arm--called the Army Air Forces--that consisted of both the GHQ and its air forces in the field and the Army Air Corps under one single commander.[10] In 1941, Major General Henry 'Hap' Arnold became the first Commanding General, Army Air Forces.

It can therefore be seen that the initial moves towards the creation of an independent air force within the US were predicated on a recognition of the rising importance of air power in warfare and, perhaps more importantly, the belief that the US Army Air Forces (USAAF) could undertake independent offensive action. With the entry of the United States into World War II after the attack on Pearl Harbor on 7 December 1941, the real question for advocates of an independent air force was whether air power would be able to live up to their predictions and grant them the equality they desired.

United Kingdom

Interest in the military application of air power commenced in the United Kingdom (UK) at about the same time that it did in the US. The difference was that in the UK the main driver for this interest came from a requirement to reduce Germany's perceived lead in aviation capability. The political pressure

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[9] Tate, *The Army and its Air Corps: Army Policy toward Aviation, 1919-1941*, 172.
[10] Tate, *The Army and its Air Corps: Army Policy toward Aviation, 1919-1941*, 179.

to create some form of military aviation capability was derived from a growing awareness that Count Ferdinand Adolf Heinrich August Graf von Zeppelin's advances in rigid dirigible airships made German attack from the air possible, and that this development could end the insularity of Great Britain.[11] The political response was the creation of the Advisory Committee for Aeronautics in 1909, and an associated recommendation by the Committee for Imperial Defence that the Navy should explore the use of rigid dirigibles, and the Army should be responsible for the development of non-rigid dirigibles and aeroplanes. The potential threat from German airships forced authorities in the Army and Navy to turn their attention to the subject of air defense. Generally, the service leaders in Britain did not encourage aeronautical activity, but they were now forced to consider this new aspect of their responsibilities as defenders of the nation and Empire.[12] Almost as soon as the threat from the air became apparent, calls for an independent air force were made. In May 1909, the Parliamentary Air Defence Committee was formed and one of the recommendations of its Secretary, Sir Arthur Du Cros, was the creation of an independent air service.[13] In the latter half of 1909, air enthusiasts tried to raise the importance of military aviation through newspaper articles, public speeches, and direct political influence. In 1910, the effects of the previous year's campaign were beginning to pay off: awareness of the importance of military aviation was increasing in public and political realms. French employment of aircraft in military maneuvers in the autumn of 1910 further added to the growing concern that the UK was falling behind its European counterparts in exploiting the capabilities of aviation.

In the face of this increasing threat and associated political pressure, the Ministry of Defense announced on 28 February 1911 that it would be standing up the Air Battalion of the Royal Engineers. The creation of the Air Battalion didn't have the desired political effect. Pressure to increase Britain's military aviation capability only grew stronger during 1911. The political response was

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[11] Alfred Gollin, *The Impact of Air Power on the British people and their Government 1909-1914* (Stanford, CA: Stanford Press, 1989), 35.

[12] Gollin, *The Impact of Air Power on the British people and their Government, 1909-1914*, 109.

[13] Michael Paris, *Winged Warfare: The Literature and Theory of Aerial Warfare in Britain 1859-1917* (New York, NY: St. Martin's Press Inc., 1992), 99-102.

the creation of the Standing Sub-Committee of the Committee of Imperial Defence, to carry out a wide-ranging enquiry into the subject of Aerial Navigation, so that the country could at last secure itself an efficient Aerial Service.[14] In particular, the committee was charged with determining whether a separate corps of aviators should be created to undertake military and naval aviation. The Standing Sub-Committee acted quickly, and its recommendations were approved by cabinet and published in a White Paper on 11 April 1912. The White Paper detailed creation of the Royal Flying Corps (RFC), which would consist of a Naval Wing, a Military Wing, and, for training purposes, a Central Flying School. The White Paper also announced the creation of The Air Committee, which would become a permanent sub-committee of the Committee of Imperial Defence. The creation of the RFC was a tremendous step forward in the autonomy of air power within Britain. Unfortunately, it contained one organizational weakness, which ensured that the first years of the RFC were characterized by constant inter-service rivalry. The main problem was that the RFC was under the control of the British Army, which meant that the Admiralty had no direct control of the Naval Wing within the Corps. This meant that the Admiralty could not control the direction of naval aviation within the RFC, and as a result the Admiralty tended to pursue Navy aviation requirements independently. The RFC was supposed to unify all of Britain's aviation efforts under one Corps; the Admiralty ensured that this was never the case.

The Army and the Navy had never been good at cooperation, and inter-service rivalry came to a head over aviation issues. There was a great deal of friction between the Army and the Admiralty over the provision of airship facilities and the continual delay in the delivery of Naval Wing aircraft from the Royal Aircraft Factory. In July 1914, the First Lord of the Admiralty, Winston Churchill, with the support of the Prime Minister, authorized the admiralty to issue a series of regulations that would remove the Naval Wing from under the control of the RFC and create a distinct aviation branch within the Royal Navy that was designated the Royal Naval Air Service (RNAS). Therefore, when Britain entered World War I on 3 August 1914, it did so with two aviation

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[14] Gollin, *The Impact of Air Power on the British people and their Government, 1909-1914*, 184.

services, the RFC equipped with 63 aeroplanes and the RNAS equipped with 50 effective machines.[15] There can be very little doubt that World War I demonstrated the increasing importance of military aviation in the conduct of war, but it would be too much of a simplification to suggest that this increasing importance alone led to calls for an independent air force. It is therefore important to focus on the two significant factors that did increase the call for independence; these were the importance of a well-prepared and integrated homeland air defense and the increasing offensive power of the aircraft.

Sir Philip Joubert de la Ferte describes the first factor in the following manner, "looking back upon this matter of air defense, the most striking facts are our total unpreparedness at the outbreak of the First World War, and the manner in which inter-departmental jealousies bedeviled the early attempts as a solution to the problem."[16] The first Zeppelin air attacks on Britain in 1915 were light and had very little effect. This was lucky because no significant defense had been created by either the RNAS or RFC. When the Germans switched to daylight aeroplane (bomber) attacks in 1917, the public's clamor for a greater measure of protection became very loud.[17] The successful bomber raids crystallized the rather scattered discussions which had been proceeding for some time over the higher direction of British air forces. The Chief of the Imperial General Staff expressed his doubts that any progress would be made unless a new organization was created. In effect, he felt that before long it would be necessary, in spite of the many difficulties he foresaw, to form a separate air force.[18] The political response was to appoint Lieutenant General Jan Smuts to conduct an investigation to consider the air services and their higher direction in general, an investigation that would forever change the direction of British air services.

The second major factor that increased the call for an independent air force was the argument over the most effective manner to employ the offensive

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[15] Francis K. Mason, *The British Fighter: since 1912* (London, UK: Conway Maritime Press Ltd., 1992), 11.

[16] Philip Joubert de la Ferte, *The Third Service; The Story behind the Royal Air Force* (Norwich: Jarrold and Sons Ltd, 1955), 49.

[17] Joubert de la Ferte, *The Third Service; The Story behind the Royal Air Force*, 44.

[18] John Sweetman, "Crucial Months for Survival: The Royal Air Force, 1918-19", *Journal of Contemporary History*, Vol. 19, No. 3 (July 1984), 529-547.

power of military aviation, an argument that continues to this day. The main dispute raging in 1917 was whether the RFC should remain an auxiliary of the Army and use its offensive capabilities in direct support of the land force or should it concentrate on maintaining air superiority and attacking the enemies' vital points to reduce their capability to wage war. This argument was part of a much larger political situation in late 1917 as the fallout of the bombing raids in England was reaching a crescendo. The Smuts report concerning the higher direction of the air force was submitted to Cabinet on 17 August 1917. The report detailed the unsatisfactory situation of British military aviation. Smuts considered the existing system of the RFC and the RNAS to be wasteful and inefficient, because they maintained separate training, supply, maintenance, and production organizations. This resulted in unnecessary competition for already scarce resources.[19] Smuts recommended the creation of an Air Ministry, the unification of the RFC and RNAS into a single Air Service, and the removal of the subordination of the Air Service to the Navy and Army. Smuts entered directly into the argument on the primary purpose of this independent force when he wrote: "As far as can at present be foreseen, there is absolutely no limit to its independent war use. And the day may not be far off when aerial operations with their devastation of enemy lands and destruction of industrial and populous centers on a vast scale may become the principal operations of war, to which the older forms of military and naval operations may become secondary and subordinate.[20]

Though there are both political and practical reasons why the RAF was granted independence, what is important for this chapter, and this paper, is to understand why the RAF thinks it got independence. The RAF believes that it gained independence for two reasons: firstly, because of the potential of strategic bombing to become the preeminent warfare in the future, and secondly, that a single Air Service was the most efficient and effective way to use scarce air power resources. The Air Force Bill was passed through Parliament during November 1917, and on 1 April 1918, the Royal Air Force came into existence. At the end of World War I, there was little doubt that

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[19] Scot Robertson, *The Development of RAF Strategic Bombing Doctrine, 1919-1939* (Westport, CT: Prager Publishers, 1995), 17.
[20] Robertson, *The Development of RAF Strategic Bombing Doctrine, 1919-1939, 17.*

aviation played a significant role in the war's outcome. The importance of aviation's tactical role on the battlefield was beyond dispute.[21] Open to question was whether strategic bombardment would have actually forced Germany to surrender. The war ended before a strategic bombing force could be created, leaving air power enthusiasts and theorists to speculate deductively about the future applications and effects of strategic air power.[22]

The history of the RAF in the inter-war years can best be described as a struggle for survival. At the end of the war there was no shortage of voices to question the continued existence of the independent air force. The Royal Navy and Army, from whose air arms the RAF had come, were most anxious to see it demobilized, disbanded, and its resources redistributed between them. In addition, frequent financial crises forced the Government to examine most closely whether the country's defense budget could afford the costs of a third service.[23] A greater understanding of the historical underpinnings that led to a focus on the autonomous aspects of airpower can be achieved by studying the method in which the RAF defended Army and Navy attacks against its independence.

The financial crises meant that funding for all of the services would be heavily curtailed, and the obvious choice of the Army and Navy was to rid themselves of the new kid on the block. During this period of time, the RAF continuously had to justify its independent existence. Scot Robertson explains that there was little in the RAF's wartime record to give it the right to peacetime independence, and arguing for its independence forced it to move away from practical experience and postulate future capabilities.[24] In the knock-down fight to maintain independence, advocates for the RAF had to become air power extremists. The RAF needed to demonstrate that there were tasks that could be achieved by air power alone. Sir Hugh Trenchard, the RAF's first Chief of Air Staff, did not solely rely on selling strategic bombing to maintain independence; in 1919, he introduced the concept of Air Control or Air Policing. The RAF argued that it was cheaper and more efficient for its aircraft to restore control

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[21] Morrow, *The Great War in the Air: Military Aviation from 1909 to 1921*, 344.
[22] Morrow, *The Great War in the Air: Military Aviation from 1909 to 1921*, 378.
[23] AP3003, *A Brief History of the Royal Air Force* (UK Ministry of Defence, 2004), 49-50.
[24] Robertson, *The Development of RAF Strategic Bombing Doctrine, 1919-1939, 27.*

during periods of resistance within the British Empire. The RAF undertook its first Air Control action in Mesopotamia in 1921, and early RAF statements stress it effectiveness and lethality.[25] While Air Control was a convenient way of keeping the RAF relevant during periods of relative peace, it did not provide the overarching wartime role that was essential to maintain independence. For that, the RAF had to rely on espousing the virtues of strategic bombing. Though the rhetoric was subtle at first, by 1928 Trenchard wrote that "the object to be sought by air action will be to paralyze from the very outset the enemy's productive centers and munitions of war of every sort and to stop all communications and transport."[26] Though the Army and Navy complained that there was no possible way for the airmen to prove their claims, the arguments made by the RAF struck a chord with the government. For the British Government, air power promised a cheaper alternative to maintaining a massive land army, and also offered the promise of being able to conduct operations without the attrition of the First World War. The arguments used by the RAF in the inter-war period were used by air power enthusiasts until the turn of the century. Much like the USAAF, the RAF entered the Second World War with strategic bombing as its centerpiece doctrine, but would it still be independent at the end of the war?

Australia

Before moving on to describe the historical circumstances surrounding the creation of the Royal Australian Air Force (RAAF), it is important to note, as Chris Coulthard-Clark describes notes, that a small service operating in an environment far removed from the mainstream of world affairs must inevitably be a "small beer" in global terms.[27] That is not to say that the experiences of the RAAF are irrelevant to this paper, but at all times, readers must take into account that they are dealing with an air force that is relatively small in comparison to the RAF and USAF. The purpose of using the RAAF in this paper

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[25] James S. Corum, "The Myth of Air Control: Reassessing the History," *Aerospace Power Journal*, Winter 2000, http://www.air power.au.af.mil/airchronicles/apj/apj00/win00/corum.htm.

[26] Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945* (Princeton, NJ: Princeton University Press, 2002), 94.

[27] Chris D. Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-39* (Sydney, NSW: Allen and Unwin Australia Pty Ltd, 1991), 464.

(other than the fact that the author is Australian) is to demonstrate that similar organizational factors affect air forces of any size in democratic cultures. The other important point to remember when discussing the RAAF is that it lived in the shadows of the RAF for a considerable period after its initial independence because Australia had only achieved independence from the UK in 1901. Early in its history, because prominent leadership positions, such as the Chief of Air Staff, were filled by British officers, many of their customs and traditions were transferred directly into the Australian service.

That close imperial bond is aptly demonstrated with how the decision was made to create a military air service in Australia: for the most part, it simply copied Britain. In April 1912, when Britain created the RFC, the Australian Army was already recruiting competent mechanics and aviators for a Central Flying School (CFS) of its own.[28] In early 1914, with the help of some training aircraft provided by Britain, flying operations commenced at Point Cook, and in April 1915 the Australian Flying Corps (AFC) was established.[29] The AFC first saw operational service in 1915 when it responded to a request from the Imperial Indian Government to provide aerial assistance during the planned campaign in Mesopotamia. When the "mother country" entered World War I in August 1914, the Australian Government responded by providing further air support; by 1916, the AFC had expanded to three front-line squadrons on the Western Front.[30] While operating in France, Australian airmen must have been aware of the arguments that were occurring over the creation of the RAF. So in the closing stages of World War I, when it became apparent that all four squadrons of the AFC (the three in France and the one in Mesopotamia) would be returned to Australia, the question being asked at the time was, would it become the nucleus of an independent air force?

In, *The Third Brother*, Coulthard-Clark contends that the birth of the Royal Australian Air Force in the years immediately following the end of the First World War was not accomplished amid unanimity and general confidence

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[28] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, xv.
[29] Group Captain Mark Lax "A Hint of Things to Come: Leadership in the Australian Flying Corps," in *Command and Leadership in War and Peace 1914-1975*, ed. Barry Sutherland (Fairburn, ACT: Air power Studies Centre, 2000), 27.
[30] Alan Stephens, *The Royal Australian Air Force* (South Melbourne, VIC: Oxford University Press, 2001), 9.

that this was a necessary or even appropriate step. Instead, it was a compromise solution arrived at after three years of continual and often futile debate which was to leave a lasting legacy of bitterness within the Australian defense community.[31] With a striking similarity to the creation of the RAF, the birth of the RAAF was seen as a solution to the inter-service rivalry and bickering between the Royal Australian Navy (RAN) and the Australian Army. The importance of military aviation was becoming self-evident in the closing stages of World War I, and in 1918 both the Navy and the Army submitted proposals for an increase in military aviation. The RAN wanted to create an Australian naval air service, and the Army wanted to increase the size of the AFC to counter a potential post-war Japanese threat in the Australasian region. Unfortunately, the funding didn't exist to create both services, and therefore a compromise would need to be reached. To ensure that it didn't get involved in a potentially messy political situation, the Australian Government absolved itself of needing to make a decision by allocating £3 million for military aviation and directing the military officers on the Defence Council to determine the best way to apportion the funds. The Defence Council set up a number of sub-committees to see if a compromise could be reached between the Navy and Army. One of the suggested resolutions was the creation of an independent service that would provide aviation to both of them. This suggestion was flatly rejected by both services. George Swinburne, Chairmen of the Defence Board of Business Administration, broke the deadlock by acting on a recommendation that the whole air service should be under one administration and authority, a clear indication that a single service meeting needs of both the Army and Navy represented the only immediate and economical way forward.[32] A temporary body, called the Air Service Committee (ASC), was created on 31 January 1919 to oversee the creation a new Australian air service. This new service wasn't born on the recognition that air power needed to be unified to be at its most effective. It also wasn't created because of the offensive potential of the aircraft. It was created out of intense inter-service rivalry and was seen to be

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[31] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 1.
[32] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 3.

the most efficient solution to providing air power to both the Army and Navy in a resource-constrained environment.

Though the initial steps to create a new air service had been taken, the road to achieving that goal would be rutted with continued inter-service rivalry. During 1920 there were persistent arguments over whether the new air service would come under control of the Defence Department or the Navy Department. The decision was to place it under the Minister for Defence. An Air Council would be created beneath the Minister to ensure joint control, and an Air Board would be created to administer the new service. The creation of the Air Board started another argument over which service would have the right to appoint the first director for air, who would effectively become the Chief of the new air service. Unfortunately, the new command arrangements did not bode well for the independence of the air service. The Air Council would consist of the Chief of General Staff (CGS), Chief of Naval Staff (CNS) and the Minister for Defence (MINDEF). The Air Board would be subject to the control of the Air Council. This was an arrangement which made clear that the Australian Air Force, soon to be officially inaugurated, would be anything but an independent and co-equal third service.[33] It was under these highly constrained conditions that the Royal Australian Air Force was inaugurated on 31 March 1921.

The inauguration of the RAAF didn't end the dispute over its very existence, and the next decade would prove incredibly difficult for the youngest service. During this period of global financial depression, funding for the RAAF was maintained at a strict minimum, and for most of the 1920s the RAAF existed as a training air force only. Also, during the entire inter-war period, there were recurring attempts to deny the infant Air Force the status of separate and equal membership of the defense family. Periodically, attempts were made to dismember and swallow it up.[34] The history of early 1920s in Australia is littered with anti-air force commentary. The influential Lieutenant General Sir John Monash made a scathing denunciation of the government for starving the defense forces of funds in the course of which he took the

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[33] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 12.
[34] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 57.

opportunity to decry the Air Force as a sham.[35] But it wasn't all just words, on 4 June 1926 the CNS submitted a proposal to the Minister for Defence that stated "that there is no justification for a separate Air Force, and its additional overhead expenses, and the correct objective should be the establishment, as soon as practicable, of two separate and distinct Naval and Military Air Arms."[36] Perhaps the most vehement attack came in 1929, when a new Labor government was elected and conducted a review of the entire Defence Department. With every aspect of the Defence budget under scrutiny, the RAAF was an easy target for the other services to deflect potential cuts in funding. The Army and Navy made a proposal, based on the alleged financial and military efficiencies, to split the RAAF between the other two services.[37] The amalgamation proposal might have gained some traction if the Army and Navy could demonstrate that such a move would save money, but because their plan was simply to split the Air Force's budget between them, the threat to the Air Force's independence slowly disappeared. The RAAF was not silent during this period of time; to defend its independence it used a very familiar argument: the Chief of Air Staff stated that one of the main reasons for separating the Air Force from the Navy and Army was to enable the powers of the aircraft to be fully developed by officers whose principal interest was such development and to prevent it being treated merely as an auxiliary to the older services.[38] The RAAF had survived the 1920s, just, and by the early 1930s there was some light at the end of the tunnel. Luckily it was not a train.

Demonstrating that it had not lost its close Imperial ties, as soon as Britain started rearming in the mid 1930s due to the growing threat in Europe, the Australian Government quickly followed suit. At the end of 1934, it announced increased spending to expand the nation's defense forces after a protracted period of neglect during the depression. For the RAAF this meant the implementation of a number of the recommendations from the plan devised in 1928, by Air Vice-Marshal Sir John Salmond, a senior RAF officer, to increase the war-fighting capabilities of the RAAF. The report recommended an

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[35] "Warning By General Monash", *Northern Territory Times and Gazette*, 13 November 1923.
[36] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 62.
[37] Stephens, *The Royal Australian Air Force*, 51.
[38] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 68.

increase in the RAAF's air defense and coastal surveillance capabilities and also made strong recommendations to improve training and the conditions of service for the airmen. As the threat of war loomed larger, a further increase in spending was authorized in 1938, which expanded the RAAF far beyond the modest objectives previously envisaged.[39]

Unfortunately, most of this spending came way too late, and when Australia followed Great Britain's lead and declared war on Germany on 3 September 1939, Australia did not have a single modern fighter, bomber, or transport aeroplane, a situation that typified the RAAF's first two decades.[40] The Australian Government elected not to deploy the RAAF as an expeditionary force in Europe. The main reason followed the requirement to maintain a functioning and capable air force at home which would allow for further expansion. Therefore, the RAAF supported the war in Europe by sending the majority of its personnel to the Empire Air Training Scheme. The War in the Pacific was different story. By the time the RAAF was required to defend Australia and undertake operations with the USAAF in Papua New Guinea, it was able to do so with fully formed RAAF squadrons as part of the Allied Air Forces. As Australian airmen entered combat in World War II, they also wondered about the effects of air power on the war and what that meant for their continued independence.

Organizational Influences

As each of the three independent air forces transitioned into World War II, they had all experienced a turbulent and conflict-ridden process of attempting to gain independence. For each of them, this process had been long and traumatic and had taught them the necessary skills for survival. For the USAAF, the final act of independence was yet to come, but they too bore the scars of organizational battle. Perhaps the most important lesson that each of them learned was that mere existence of the "air domain" did not necessarily justify the creation of an independent air force. Air power could be applied without the formation of an independent air force, and the struggle the early air

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[39] Coulthard-Clark, *The Third Brother: The Royal Australian Air Force 1921-1939*, 441.
[40] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 3.

forces faced was not necessarily convincing critics of the importance of air power, but justifying why it needed to be applied by an independent service.

Though it would be theoretically incorrect to suggest that the very existence of the land and sea justifies the existence of armies and navies, there seems to be a great deal less discussion about the need for an independent Army or Navy. The lack of discussion though, should not hide the fact that each of these services went through a period of time where their existence was not guaranteed. National armies have not always existed, and in the United States they were resisted for a great deal of time. One only has to read Alfred Thayer Mahan's writings on naval strategy to understand that the creation of a large naval fleet needed to be championed and urged into existence. Armies and navies now have such a long historical precedence for their existence, that their independence is less likely to be questioned; but more importantly, they no longer feel the need to justify it. Independent air forces have not reached the same point; they are still trapped in what this paper will refer to as the "justification cycle". What this pre-World War II history has portrayed is the commencement of that cycle. In each of the three cases studied there was significant resistance, bordering on outright hostility, to the creation of an independent air force. The significant resistance encountered was not necessarily ideological; it was based around the fact that the creation of an independent air force reduced the resources available to the Army and Navy. They were unwilling, for political reasons, to cite this reduction of resources as their primary concern over the creation of an independent force and, therefore, normally attacked the need for an independent air force along ideological or organizational themes. In defense, the independent air forces tended to justify their existence on the efficiency and increased effectiveness of having air assets concentrated under one service, and, towards the end of the First World War, on an ability of air power to undertake independent action.

It would be unrealistic to expect that during this time frame when each of the three air forces was struggling for independence that they would not spend a great deal of time justifying themselves. The creation and survival of their newly formed services required them to carve out an independent function. This in turn tended to create a narrow view of the purpose of air

power. To ensure that they gained or maintained their independence, all three air forces needed to stress the independent aspects of air power. At this early stage, this justification tended to be theoretical in nature, because there hadn't been any large scale deployment of offensive air power on which to base their claims. As the air forces of the democratic countries entered World War II, they believed in the efficacy of air power and the justifications they had made to gain measures of independence.

<div align="center">**The Rise of the Bomber**</div>

United States of America

During the Second World War, air power would play a significant role in the defeat of both the German and Japanese regimes. The main question was whether those achievements resulted from independent air operations or from direct support of the other two services? During the war, the increasing importance of air power was recognized by both political and military leaders. On 2 March 1942, President Roosevelt made the Commanding General of the Army Air Forces a member of both the Joint and Combined Chiefs of Staff. His stated reason for the inclusion was the growing importance of air power.[41] Perhaps the most defining moment during this period of time was the issuing of FM 100-20, *Command and Employment of Air Power*. This document is famous for the often quoted statement that "land power and air power are co-equal and interdependent", and that "neither is an auxiliary of the other."[42] The document also stressed the importance of gaining air superiority, the inherent flexibility of air power, and maintaining flexibility by placing air assets under a single air force commander. It is difficult to stress how ingrained these fundamental beliefs are in the organizational make-up of most modern independent air forces. They have become cornerstones on which most air forces continue to justify the need for independence. Though FM 100-20 raised the importance of the air force within the defense organization, it would be another document that was as equally important to the USAF's continued quest for independence.

For those air force leaders fighting for independence, the United States Strategic Bombing Survey (USSBS) would be a report card on the achievement

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[41] McClendon, *The Question of Autonomy for the United Sates Air Arm, 1907-1945*, 128.
[42] FM100-20, *Command and Employment of Air Power* 1943, Section 1, Para 1, http://www.au.af.mil/au/awc/awcgate/documents/fm100-20_jul_1943.pdf.

of their primary independent mission, the strategic bombing of Germany's industrial base and war fighting capability. In, *Rhetoric and Reality in Air Warfare*, Tami Davis Biddle paints the picture of a USAAF organization that, because of the upcoming battle for service independence, was desperate to ensure that their own perspective on the war was known and available to others.[43] While Biddle's main argument revolves around the efficacy of strategic bombing, a topic this paper is desperate to avoid, she does suggest that USAAF leadership at the end of the war manipulated the focus and final wording of the USSBS to ensure a favorable outcome. It is difficult to determine how much effect a positive report had on the USAAF's continuing call for independence, but it would be safe to suggest that a negative report would have provided the Army and Navy with a great deal of ammunition during the final steps towards independence. Before moving on to discuss that process, it is important to understand that the USBBS had one long lasting effect on Air Force organizational culture that reaches even further than supporting the quest for independence. The USBBS was one of the first documents to introduce the concept that air power could be "decisive" when it concluded "allied air power was decisive in the war in Western Europe. Hindsight inevitably suggests that it might have been employed differently or better in some respects. Nevertheless, it was decisive."[44] The word "decisive" has haunted the providers of air power ever since. The suggestion that air power alone can be decisive has been one of the most divisive beliefs within air force culture and it will haunt this and other chapters.

The final push for independence within the US started before the end of the second World War, when the Special Planning Division of the General Staff released a study that suggested that an absence of real unity of command had hampered the prosecution of the war and that the solution was the creation of a single department of national defense to coordinate the various agencies of the nation's Armed Forces.[45] In response to that suggestion, the Joint Chiefs of

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[43] Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, 272.
[44] United States Strategic Bombing Survey Summary Report (European War), 30 September 1945, http://www.ibiblio.org/hyperwar/AAF/USSBS/ETO-Summary.html#page1".
[45] McClendon, *The Question of Autonomy for the United Sates Air Arm, 1907-1945*, 131.

Staff appointed a committee on 9 May 1944 to examine the future command structure of the US Armed Forces. The committee examined proposals to maintain the status quo, to create three separate departments (War, Navy, and Air), or to create one single Department of Defense, under which each of the three services would have an equal footing. The committee reported on 11 April 1945 and recommended the single Department of Defense option. Talking directly to the subject of air force independence, the committee recommended "the establishment of an independent United States Air Force coequal with the Army and Navy."[46] Navy leaders opposed the unification of the departments and the granting of independence to the USAAF because of among other concerns, a perceived threat to their own air arm.

The arguments over the creation of a single department, and associated independent air force, continued for over two years. The Navy was going to lose a great deal of political independence if the departments were merged, and the argument over the independence for the USAAF provided a good stumbling block to reduce progress. President Harry S. Truman became more and more impatient at what seemed to be an evolving impasse.[47] The solution was to placate the Navy by designating specific roles for its air arm. This discussion on roles and missions opened the door for all of the services to make a case for their own organic aviation that they considered essential to primary service missions. The final solution would be a compromise that didn't suit any of the three services. When the National Security Act of 1947 was passed on 26 July 1947, it finally gave the Army Air Forces independence, and the United States Air Force (USAF) was created. The problem was that it also legitimized three other military air forces, for the Army, Navy, and the Marines. This would lead to continual inter-service battles over roles and responsibilities, but even worse for the USAF, the existence of three other air forces would continue to challenge the need for an independent air force. Those concerns were not a pressing priority for the USAF at the end of World War II because it was about to become the primary provider of national defense.

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[46] Herman S. Wolk, *Towards Independence: The Emergence of the U.S. Air Force 1945-1947* (Bolling AFB, DC: Air Force History Support Office, 1996), 10.
[47] McClendon, *The Question of Autonomy for the United Sates Air Arm, 1907-1945*, 163.

In January 1946, when independence seemed inevitable, General Carl A. Spaatz, the USAAF Commanding General, after consultation with Army Chief of Staff, decided to create three major combat commands within the air force. Strategic Air Command (SAC), Air Defense Command (ADC), and Tactical Air Command (TAC) would be the primary combat providers in the post-war air force. In *The Struggle for Air Force Independence*, Herman S. Wolk suggests that the creation of TAC was a move by air force leadership to convince the Army Chief of Staff that the air forces still considered support to the Army a primary responsibility but also as a method of ensuring that during the discussion occurring over missions and roles that the US Army couldn't claim a need for Army aircraft to conduct close air support (CAS). In the post-war era, the newly formed USAF's main focus would be on SAC. The development of nuclear weapons and the rise of the Soviet Union were changing the perceived role of the United States' Armed Forces. General Curtis E. LeMay characterized this change in perception when he said "that our only defense is a striking power in being, of such size that it is capable of delivering a stronger blow than any of our potential enemies."[48] USAF leaders asserted then that air power was the most important part of the nation's defense and that national security demanded a strong Air Force in being.[49] These beliefs were backed up by the War Department Policies and Programs Review Board, which stated that "the favorable psychological effect of air power in being and the adverse psychological effect of lack of air power are factors of much great importance before the initiation of hostilities than are the state of readiness or existence of other types of forces."[50] The USAF did not have it all its own way though. In December 1947, Rear Admiral Daniel V. Gallery proposed an aggressive campaign aimed at proving that the Navy could deliver the atomic bomb more effectively than the Air Force.[51] In *Revolt of the Admirals*, Jeffery Barlow details the extraordinary lengths gone to by both the Navy and the Air Force in an attempt to convince the US Government that they had the most reliable and

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[48] Testimony of Major General Curtis E. LeMay before the War Department Equipment Board, Jan 3, 1946.
[49] Wolk, *The Struggle for Air Force Independence 1943-1947*, 197.
[50] War Department, *Final Report of the War Department and Program Review Board* (Washington, DC: War Department, 1947).
[51] Wolk, *The Struggle for Air Force Independence 1943-1947*, 239.

effective method of delivering nuclear weapons. For the Air Force, this once again proved that even at a time when it was considered as the primary provider of national defense, the fight over dwindling defense funding would lead to bitter inter-service conflict, where each service would attempt to convince the government that it was more relevant to current strategic defense requirements.

The effects of technological advancement, a US Government desire to reduce defense spending, and the start of the Cold War had aligned to make SAC the principal deterrent in a policy that would become known as Massive Retaliation. The newly formed USAF used this relevance to its advantage in answering any continuing questions over the need for an independent air force. The need was obvious; the USAF was the United States' nuclear deterrent.   It was at the tip of strategic relevance, but how long would it stay that way?

United Kingdom

Luckily, the RAF was not relying on a positive outcome from a survey of World War II strategic bombing efforts to achieve independence. The British Government was not keen to undertake a survey of the RAF's bombing efforts, because it was anxious about what such investigations might reveal.[52] The concern lay in the fundamental difference between British and American bombing policies during the war. The US was very careful to ensure that its stated policy was to bomb industrial targets to reduce Axis war fighting capability. The British differed because they were willing to state that they were undertaking area bombing of German cities to reduce the morale of the German people, which in turn, would reduce the effectiveness of the Germans to resist. British government officials did not want a detailed survey of British bombing activities because, over time, they realized their policy might be questionable on humanitarian grounds. The British, however, eventually did undertake a survey. Completed by the British Bombing Survey Unit, it argued against the efficacy of city bombing, suggesting that it had not been effective in reducing morale or decreasing industrial output.[53] There is very little written history that

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[52] Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, 273.
[53] Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, 280.

suggests that either the British Army or the Royal Navy attempted to make use of the failure of strategic bombing to question the need for an independent air force. This might be because of the unwanted attention that such questions would have created for the British Government, but it also might have been because the British public remembered the feats of the RAF in the Battle of Britain and that any suggestion of removing its independence would have been politically damaging. The RAF nonetheless had used strategic bombing as one of the main reasons to gain independence, so it would be only a matter of time before that presumption was questioned. This must have been especially true considering the crippling financial situation in Britain at the end of the war. There had to be drastic cuts in the funding for the British Armed Forces, and these financial measures would be a two-edged sword for the RAF. The bad news for the RAF was that drastic budget cuts would reduce its number of frontline aircraft from 55,000 at the end of World War II, to a little more than 1000 by 1947.[54] The good news was that the British Government was looking for the most cost-effective method of providing national defense, and in a very similar decision to that of the US, it determined that the best method would be via nuclear deterrence.

In November 1944, the British Chiefs of Staff set up the Technical Warfare Committee, known as the Tizzard Committee, to report on the likely advancement of weapon technologies in the near future. The preliminary findings of the Tizzard report, released in early July 1945, foresaw the devastating effects of nuclear weapons, envisaged the development of jet bombers able to cruise at 500 mph at 40,000 feet carrying a bomb load equivalent to that of a Lancaster, and postulated the idea of nuclear deterrence.[55] The committee's findings were emphasized when the US exploded the first nuclear weapons on the 16 July 1945 and used them operationally in August of that year. In October 1945, the Chiefs of Staff made a recommendation to the Government that if nuclear weapons were not going to be controlled by a treaty within the United Nations Organization, Britain should

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[54] Paul Graham, *RAF Nuclear Deterrence in the Cold War*, Air Power Review, Volume 10, Number 1, Spring 2007, Royal Air Force, 50.
[55] Humphrey Wynn, *The Proceedings of the Royal Air Force Historical Society*, Issue No 7, February 1990, 8.

pursue her own nuclear program. The reason given was that "the best method of defense is likely to be the deterrent effect that the possession of the means of retaliation would have on a potential aggressor."[56] On 8 January 1947, the British Government decided to build a British nuclear weapon and sent out letters to aircraft manufacturers inviting them to submit tenders for the new jet-powered strategic bombing fleet that would become known as the "V-Force". In a similar manner to the USAF, the RAF had benefitted from the same alignment of strategic factors to become the most relevant method of providing national defense for Britain. The development of nuclear weapons, the inability of the British to support large defense budgets, and the increasing threat from the Soviet Union made a nuclear-equipped bomber fleet the most efficient solution. In 1948, Lord Tedder, the Marshal of the RAF, when discussing the role of the RAF in the application of national defense policy, suggested that the air striking force would become of paramount importance.[57] The development of the V-Force meant that the RAF didn't need to search for a completely new concept to justify its existence. It would be able to continue arguing the importance of strategic bombing but also able to point to air power as the most efficient application of military force. Professor Lawrence Freedman sums up these thoughts about the V-Force by saying "it allowed the doctrine of strategic bombardment, which in a sense had been almost created by Trenchard in the inter-war years, to last longer than might otherwise have been the case."[58]

The RAF, in a similar manner to the USAF, also had to face bitter inter-service rivalry over the creation of the V-Force. Both the Army and the Navy saw that a reliance on nuclear deterrence would mean a significant cut in resources to their respective forces and therefore continued to argue the importance of conventional deterrence within Europe. The argument presented by the Army and Navy was that conventional forces had to be the primary deterrent to the possibility of major conventional attack and only if the conventional deterrent was inadequate would the nuclear deterrent become

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[56] Humphrey Wynn, *The Proceedings of the Royal Air Force Historical Society*, Issue No 7, February 1990, 9.

[57] Tim Laming, *V-Bombers: Vulcan, Victor and Valiant - Britain's Airborne Nuclear Deterrent* (Sparkford,Somerset: Patrick Stephens Limited, 1997), 24.

[58] Lawrence Freedman, *The Proceedings of the Royal Air Force Historical Society*, Issue No 7, February 1990, 57.

relevant.[59] As with most inter-service conflicts, the arguments were made on theoretical grounds, but their true cause was a lack of sufficient funding to adequately support both conventional and nuclear deterrents. In an attempt to counter this argument, Sir John Slessor, in his 1952 Global Strategy Paper, suggested that the RAF could be equipped with tactical and low-yield nuclear weapons to reduce enemy forces on the ground.[60] A very similar counter argument was entertained in the US for a considerable period of time until the practicalities of operating on a battlefield decimated by tactical nuclear weapons became far too obvious to ignore. The support for the RAF's manned nuclear bomber fleet continued well into the mid-1950s, and in the 1957 Defence White Paper, the RAF's V-Force was one of the very few defense capabilities that was not heavily reduced. The primary concept within the 1957 White Paper was that the "overriding consideration in all military planning must be to prevent war rather than prepare for it."[61] In the same White Paper, the manning for the entire British Defence Forces was placed at a figure 70,000 below the minimum recommended by the Chiefs of Staff. The White Paper had secured the need for the V-Force but had devastated other parts of the RAF. Of particular importance was the massive reduction in the number of fighter squadrons for air defense, down from the proposed twenty squadrons to the final approved number of five. During this span of time, the RAF learned a very important lesson: during periods of limited resource availability, the service that could best align itself with the strategic policy of the government would be considered the most relevant and therefore maintain an appropriate level of funding. Justification for the continued need for air power would be based on cost-effectiveness and efficiency.

Australia

At the end of World War II the RAAF had become an immensely powerful and successful organization and had grown to be the fourth largest air force in

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[59] Arthur Hockaday, *The Proceedings of the Royal Air Force Historical Society*, Issue No 7, February 1990, 30.

[60] Frank Cooper, *The Proceedings of the Royal Air Force Historical Society*, Issue No11, February 1993, 13.

[61] T. C. G. James, *The Proceedings of the Royal Air Force Historical Society*, Issue No 4, September 1988, 18.

the world.[62] It had operated with distinction in both the European and Pacific theatres and had demonstrated the importance of air power in modern warfare. Unfortunately though, the end of the war meant a return to reality for the RAAF. Australia just was not big enough to maintain an air force of that size in peacetime conditions, and with the Japanese threat removed, there was no equivalent of the Soviet Union forcing the need for a high level of readiness. Unlike the USAF and RAF, the RAAF was unable to align the strategic factors to push for a large independent bombing fleet at the end of World War II. Though Australia was experiencing similar reductions in defense budgets, it didn't have the immediate threat of the Cold War to spur the need for nuclear deterrence. In 1945, buoyed by the success of air power during the war, the RAAF Chief of Air Staff proposed a post-war air force of 34 operational squadrons and almost 35,000 airmen (down from 170,000 at the end of the war).[63] That proposal was slashed by the Australian Government to 12 operational squadrons and just over 12,000 airmen. The RAAF's dream of maintaining a potent, independent force was gone. It would have to find a way beyond sheer mass of maintaining strategic relevance.

In the late 1940s and early 1950s, Australia's small population and associated national wealth meant that a defense policy based on self-sufficiency wasn't going to be affordable. Therefore, Australia's defense policy for that period relied on the fact that if Australia was threatened by a significant enemy, it would call on a "great and powerful friend" for national defense.[64] During this time period the real question was, whether that great and powerful friend would be Great Britain or the US. The natural tendency for Australia would have been to maintain its imperial ties with the UK, but that had not worked out quite so well during World War II. With Britain experiencing severe financial difficulties, there were questions about the ability of the UK to come to Australia's aid. With this defense policy in mind, the purpose of the Australian Armed Forces was to provide military assistance to the campaigns of both the US and UK to shore up a strategic relationship. Realizing the importance of remaining strategically relevant, the RAAF during this period of time moved its post-war

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[62] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 6.
[63] Stephens, *The Royal Australian Air Force*, 173.
[64] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 29.

focus immediately to expeditionary operations. Plan D, which was the fourth attempt of the RAAF to get a post-war organization approved, centered on the concept of a mobile task force that contained all of the elements of air force capability, including fighter, bomber, and transport functions. The RAAF realized that if it emphasized the more traditional air force roles of air defense and strategic deterrence, in a similar manner to the USAF and RAF, it risked becoming out of step with defense policy. To maintain strategic relevance it needed to provide the Australian Government with air power that could be projected in support of allied operations. The RAAF had to become an expeditionary force to maintain that relevance.

Though the RAAF emphasized its expeditionary focus, its organizational ties to the more traditional air force roles were never severed. The "RAAF accorded first priority to its bomber force, which would act as a deterrent in the Cold War and take the offensive in the fight for air superiority when operating in either Australia or Malaya in a 'hot war'. Bomber crews, not fighter pilots, were regarded as the cutting edge of national air defense, with a bomber offensive constituting "the first line of air defense' and the only method by which general air superiority could be gained."[65] In January 1954, the RAAF benefited from a growing belief that Australia could not afford to maintain two military air forces. To correct this issue the Defense Minister proposed to the cabinet that the RAAF take responsibility for the Navy's fleet air defense, maritime strike, and reconnaissance roles while drastically reducing the size of the fleet air arm. The decision was a watershed moment in the RAAF's post-war development; it precipitated a re-equipment program which was the largest in peacetime history and also signaled a change of strategic alignment for Australia. [66] Britain's influence in Asia was diminishing due to the continuing reduction in defense spending and its necessary European focus. It appeared to Australia that the only nation capable of securing the Australasian region was the US. Very slowly Australia began to align itself with the policies and doctrine of the US. Nowhere was that more obvious than in the purchase of the RAAF's new aircraft. None of three operational types purchased were from the

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[65] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 39.
[66] Stephens, *The Royal Australian Air Force*, 226.

United Kingdom, something that would have been unheard of prior to this strategic shift.

The decision taken in 1954 meant that for the next three years the RAAF would get approximately 42% of the defense budget, compared to the 9% of the budget it received during the 1920s. The re-equipment program meant that the RAAF was gaining a modern offensive capability, and this meant that the air force leadership could be bolder about the role of air power in the defense of Australia. In 1954 the RAAF published the AP1300, *Operations*, which was the service's first real air power doctrine. The manual's contention, which reaffirmed the fundamental belief of Australian airmen, was that the primary agent of air power was a weapons system capable of delivering enormous fire power over great distances.[67] Finally, the RAAF had a strategic deterrence philosophy similar to that of the USAF and RAF. It might not pack the same punch as the nuclear deterrent, but it served the same purpose of fundamentally increasing the importance of air power. By the mid-1950s, the RAAF had gained co-equal status with the other services and considered itself both strategically relevant and operationally capable.

Organizational Influences

During this period of time the three independent air forces were still required to justify either their need to become independent or to maintain that independence. The two main lines of argument used to justify the requirement for an independent air force were the need to appear to be decisive and the increased efficiency a single air force provided. The need to be decisive is a difficult concept to describe. The word itself is often replaced by terms such as "war-winning" or "strategic", but put simply, it means that the air force believes that it needs to be able to do something more than just provide support to other services. These actions are often referred to as independent air operations, strategic bombing, or more recently "the air campaign", but they all have one essential element: an understanding that the air force is capable of achieving strategic effects through independent action.

A justification argument based on efficiency normally takes one of two forms. First, the most efficient way to apply air power is under the command of

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[67] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 43.

one air force. Air power distributed between several services suffers from reduced flexibility and creates unnecessary waste through duplication. Therefore, one independent air force is capable of making the most of scarce aviation resources. The second strain revolves around the cost-effectiveness of air power; during this period of time there was a belief that national defense needs could be met by maintaining a small strategic deterrent that would prevent war. The air force was the most cost-effective way of maintaining this deterrent, whether it worked or not is another question. What the air forces learned was that arguments based on cost effectiveness were extremely important to ensuring required levels of funding. During this period the air forces also learned the importance of remaining strategically relevant, a lesson that all armed services learn when defense resources begin to diminish. Arguments based on decisiveness and efficiency are important, but it is equally important to align the principal military concepts of your service with the stated defense policy of your nation. Maintaining strategic relevance has been a priority for each of the independent air forces since their creation, but occasionally that focus is lost, normally with dire consequences.

The other major organizational threat that crystallized during this period of time was the continued existence of air forces within the other services. The existence of these forces tends to be a dual threat to the continued independence of air forces. Firstly, they diminish some of the elements of justification based on efficiency, because they demonstrate that air power can be used effectively in a distributed manner. In part, this threat can also explain why airmen are so insistent that air power should come under the command of one airman during operations. If air power can operate effectively in a dispersed manner, it reduces the need for an independent air force. The other major threat caused by the existence of air power within other services is directly related to the air forces' need to be able to do something independently. This threat doesn't come from the air power capability the other services are able to generate. Instead, it stems from a concern that if the air force is not doing something independently, it is not needed. If the other services are able to support themselves with organic air power, the need for an independent air force subsides. This is the reason why independent air forces tend to fight so

hard to ensure that the other services do not encroach on roles and missions that would reduce their reliance on the air force. Air power within the other services is a continuing threat to the need for an independent air force.

The three independent air forces believed that their continuing independence was intrinsically tied to their ability to undertake independent air action to create strategic effects. Even though operations in World War II had proved the utility of the aircraft in providing support to land and maritime forces, in the eyes of air advocates, that utility did not appear strong enough to justify the need for an independent air force. Even though the bombing surveys at the end of World War II had raised some questions about the efficacy of independent air action, the proof was not conclusive enough to force any form of real concern within the independent air forces. The justifications they had used to maintain independence were still valid at the end of the Second World War, and by the early 1950s, when the primary method of defense was the strategic deterrent created by a manned bomber fleet, the justification was obvious, and all three of the independent air forces could feel organizationally safe. It will be important to track what happens to that feeling of organizational safety when the decisiveness of air power comes into question.

The Bomber Falls from Grace
United States of America

It would have been hard for the leaders of the USAF in the mid-1950s to envisage that in less than twenty years the relevance of the strategic bomber would start to be questioned. By the mid-1950s, SAC had become an extremely powerful organization within the United States' defense establishment. Responsible for the delivery of the nuclear deterrent, it was afforded special treatment. When other US forces were placed under unified commanders in 1947, SAC remained an independent force that would report directly to the Joint Chiefs of Staff.[68] So what happened in the subsequent two decades to challenge the importance of the strategic bomber within SAC? The two main factors that led to this challenge were the creation of the Inter-Continental Ballistic Missile (ICBM) which challenged the dominance of the strategic bomber

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[68] Wolk, *The Struggle for Air Force Independence 1943-1947*, 175.

in delivering nuclear weapons, and the United States' experience in limited wars, which began to highlight the limitations of air power in achieving independent strategic effects.

In *A Fiery Peace in a Cold War,* Neil Sheehan details the tremendous organizational struggle that the USAF endured during the introduction of the ICBM. In the beginning, USAF leaders such as General Curtis E. LeMay, refused to believe that the strategic bombers within SAC were in danger of being undermined as a credible deterrent by the advance of technology.[69] Some of this refusal was based on the fact that ICBMs were yet to prove themselves technologically. Another aspect was the fact that the USAF was under increasing pressure to fund all aspects of air force activity during a period of reduced defense budgets. This meant that they were forced to make a financial choice between the proven strategic bomber and the experimental ICBM. There can be very little doubt though that the organizational identity of the USAF was centered on the strategic bomber, and the ICBM was a threat to that identity. The USAF did not become organizationally interested in the ICBM until several factors forced its hand.

Technological advancements within the USSR were bringing into question the ability of the strategic bomber to remain a viable nuclear deterrent. In the mid-1950s, the US began to believe that the USSR had taken the lead in developing ICBMs. If the Soviets were able to field a sizable missile force, they would make the strategic bombers within SAC impotent, because a first strike capability could destroy the bombers on the ground. Also, the rapid strengthening of Soviet air defenses meant that the ability of the strategic bomber to reach its target was now being questioned. Both of these advances meant that the strategic relevance of the bomber was diminishing. For the USAF to maintain its role as the deliverer of nuclear deterrence, it had to ensure that it became responsible for the weapon system that would replace the bomber. The second factor that spurred the USAF into action was Army interest in developing an ICBM capability. If the Air Force did not build an

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[69] Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York, NY: The Random House Publishing Group, 2009), 152.

ICBM, the Army would snatch the nuclear deterrence mission from it.[70] Organizationally, the USAF felt it could not afford to lose the nuclear-deterrence mission to the Army. The strategic-bombing mission contained both elements of the justification for an independent air force. It meant that the USAF was able to undertake independent action, and it made the USAF an extremely cost-effective defensive measure. Once the technical ceilings of nuclear missiles were overcome, USAF leaders pulled out all stops to become the primary authority for ICBM capability.

When the United States entered the Korean War in 1950, the USAF was barely three years old and was still basking in the glory created by the apparent success of air power in the Second World War. The USAF's focus in the years directly after World War II was the creation of the strategic-bombing force within SAC; this focus meant that it was poorly prepared for the Korean War. The organizational issues created for the USAF during the Korean War are best summed up by the following quote from General Matthew B. Ridgeway, the Chief of Staff of the United States Army in 1953: "…there are those that felt, at the time of the Korean War, that air power might accomplish miracles by interdiction, by cutting the flow of reinforcement to and supply to the embattled enemy. The fact that it could not accomplish these miracles has not yet been accepted as widely as it should. Air Power does have its definite limitations, and even some in high positions fail to acknowledge them."[71] The Korean War was not the predicted operational or strategic success for air power that advocates believed it was going to be. Not only had the interdiction campaigns been ineffective against the Korean peasant supply force; but more importantly for the USAF, the "Air Pressure" strategy, embarked on in the spring of 1952 and intended to give the Air Force an independent role after being "tied down" to support of the ground forces, failed to force the North Korean government to agree to a settlement.[72]

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[70] Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon*, 222.
[71] Jeffrey Grey, *Definite Limitations: The Air War in Korea 1950-1953*, ed. Alan, Stephens, *The War in the Air 1914-1994* (Fairburn, ACT: Air Power Studies Centre, 1994), 141.
[72] Grey, *Definite Limitations: The Air War in Korea 1950-1953*, 150.

There were a number of lessons that needed to be learned by the USAF from operations in the Korean War. Firstly, the USAF was not adequately trained, prepared, equipped, or organized to provide CAS to the US Army. Secondly, interdiction campaigns do not necessarily work against a nation that is not heavily dependent on conventional military logistics. Lastly, strategic bombing will not necessarily force an opponent to surrender or reach settlement. The Korean War demonstrated that if the costs of resisting the bombing campaign are less than the perceived costs of agreeing to terms, strategic bombing is unlikely to work. According to Conrad C. Crane, *American Air Power Strategy in Korea 1950-1953*, the USAF failed to learn any of these lessons. A strong organizational belief in the decisiveness of air power failed to allow the USAF leadership to accept that air power had certain limitations, and that any failure to "win the war" was a result of political decisions and restraints placed on all commanders.[73] Whether the USAF leaders actually believed that was the case is open to question, but their response can be seen as a method of defending the independent mission of the USAF. As far as the tactical lessons were concerned, the USAF was too focused on creating SAC to address the concerns of CAS support for the Army. USAF basic doctrine during the 1950s seemed to assume that the struggles in Southeast Asia did not exist and, for the most part, that the Korean War had not happened. Service Manuals stressed the strategic bombing mission throughout the 1950s, and although limited conflicts were occasionally mentioned, the policy remained that the best preparation for a limited war was being prepared for a general war.[74] These lessons continued in the next conflict.

While there were many tactical and operational lessons that the USAF needed to learn from operations during the Vietnam War, this paper requires an understanding of only those aspects of the conflict that added to the USAF's continuing focus on the independent features of air power. In, *Bombing to Win*, Robert A. Pape suggests that the lesson the USAF should have learned from the Vietnam War was that not every adversary is susceptible to coercion by air power. Pape argues that the Rolling Thunder air campaign, which ran from

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[73] Conrad C. Crane, *American Air power Strategy Korea 1950-1953* (Lawrence, Kansas: University Press of Kansas, 2000), 173.
[74] Crane, *American Air power Strategy Korea 1950-1953, 175.*

1965 to 1968, was operationally unsuccessful in reducing the Viet Cong's war fighting capability because it did not rely on conventional military equipment or logistics. He also argues that the strategic bombing campaign in North Vietnam was unsuccessful because the North Vietnamese believed that they were fighting for such important interests that they were willing to countenance considerable costs to attain them.[75] He suggests that the Linebacker series of air campaigns were more successful because they severely reduced North Vietnam's conventional military capability, badly needed to continue the push southwards. A stalemate on the battlefield resulted, which in turn, forced a coming to terms with the US. Did the USAF learn that not every adversary is susceptible to coercion by air power? Tami Davis Biddle doesn't think it did. She suggests that the Air Force's response to criticism implying that it had not lived up to public expectations was not to try to modify those expectations but rather to insist that bombing could be decisive – if only it could be freed from political restraints.[76] Walter Boyne, clearly an air power advocate, demonstrates the tendency that Biddle eluded to when he defends USAF action in Vietnam by saying "the result of Linebacker II was exactly what had been predicted for the total application of air power in North Vietnam, quick military victory. Had it been applied in the first years of the war, the lives of millions of people would have been spared."[77] Why the USAF chose to interpret the lessons from Vietnam in this manner will be answered at the end of this section.

United Kingdom

In 1958, the arguments raged in the Joint Planning Staff over the requirement for a nuclear deterrent and the shape that it should take. All three services took conflicting positions and for service reasons refused to compromise. The RAF, following the lead of the USAF, wanted to ensure its continued role in the nuclear deterrent by diversifying to Blue Streak Intermediate Range Ballistic Missiles (IRBM). The Army continued to state that it did not believe in the need for an independent strategic force because it

[75] Robert A. Pape, *Bombing to Win: Air Power and Coercion in War* (Ithaca, NY: Cornell University Press, 1996), 209.
[76] Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, 299.
[77] Walter J. Boyne, *Beyond the Wild Blue Second Edition; A History of the United States Air Force, 1947-2007* (New York, NY: Thomas Dunne Books, 2007), 184.

wanted to ensure that it didn't suffer further cuts to the conventional forces inside Europe. The Navy simply did not agree that the RAF needed both bombers and missiles; this was an attempt to ensure the RAF's portion of the defense budget did not rise even further.[78] To determine the most appropriate way forward the British Nuclear Deterrent Study Group was set up in 1959. When the group reported at the end of the same year, it recommended that because the Blue Streak IRBM could be seen as a first-strike weapon, the British should purchase the US Skybolt Air Launched Ballistic Missile (ALBM). The Group had considered the purchase of the Polaris submarine-launched ballistic missile (SLBM), but the Royal Navy showed little enthusiasm for taking on the nuclear deterrence role, because it realized the cost in terms of conventional ships and weapons.[79] The recommendation was accepted by the British Government and the decision was made to purchase the Skybolt system. Unfortunately, all of these plans fell into disarray when on 11 December 1962, the US Secretary of Defense decided to cancel Skybolt as part of his rationalization of the number of US nuclear missile systems under development. In response, the British Government elected to purchase the Polaris SLBM as a replacement. One may have expected that the RAF would have seen the loss of Skybolt as a major blow to its strategic relevance, but because it was able to keep the V-Force as the second leg of the nuclear deterrent, this decision does not seem to have caused much consternation. By the mid-1960s, mind you, the RAF had a great deal more to worry about.

The mid-1960s was a period of debilitating economic crisis within the UK, and the period was characterized by internal strife and continual cuts in defense spending. As previously discussed in this paper, the threat of large-scale defense cutbacks normally leads to a period of intense inter-service rivalry, as services attempt to grab the largest share of the contracting budget. The main argument for the RAF during this period of time was with the Royal Navy over sea or land-based air power. The Royal Navy was desperate to secure a new generation on naval aircraft carriers, but standing in the way was the

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[78] Frank Cooper, *The Proceedings of the Royal Air Force Historical Society*, Issue No7, February 1990, 28.
[79] Frank Cooper, *The Proceedings of the Royal Air Force Historical Society*, Issue No11, February 1993, 16.

RAF's claim that aircraft carriers were an extremely expensive way of providing a very small amount of air power, and that the RAF would be able to provide more capability from land-based aircraft. The Navy countered the claim by arguing that land-based air power was restricted to areas that could be accessed from developed air strips. As we have seen previously, the RAF's argument for its continued independence was based on both cost-effectiveness and the increased flexibility that more land-based aircraft provided. The RAF finally won the argument in January 1966 when the naval aircraft carrier project was cancelled and the purchase of fifty F-111s was confirmed.[80] Unfortunately, that was not the end of the cuts. In June 1968, the F-111 purchase was cancelled, and the decision was made to replace them with more conventional aircraft that the RAF had already ordered. The RAF learned that when it came to ensuring appropriate levels of funding, it was necessary to be a strong advocate for the capabilities of your force.

The RAF also had a number of limited-war experiences during the period from 1950-1970. The two operations that most involved the application of offensive military air power were the Malayan Emergency and the counter-insurgency operations in Oman and Aden. In 1948, the British-led colonial government of Malaya declared a state of emergency because of the increasingly brutal insurgency campaign sponsored by the Malayan Communist Party.[81] The RAF was employed to conduct a bombing-and-strafing campaign to kill the communist insurgents. At the commencement of the Emergency, the lack of adequate charts, maps, and photographic coverage limited the accuracy and therefore the effectiveness of the RAF's bombing campaign. In describing the ineffectiveness of the bombing campaign, one English Special Branch Officer reported that the collateral damage created by the campaign had a catastrophic impact on the "Hearts and Minds" campaign, which caused a loss of support and actionable intelligence from an otherwise neutral population.[82] The official

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[80] Frank Cooper, *The Proceedings of the Royal Air Force Historical Society*, Issue No11, February 1993, 19.

[81] Peter Rixon, "Aerospace Power in the Malayan Emergency," in *Air Power and Wars of National Liberation: The Proceedings of the 2002 RAAF History Conference*, ed. Wing Commander Keith Brent (Canberra, ACT: Defence Publishing Service, 2002), 117.

[82] Bryan Hunt, *Air Power and Psychological Warfare Operations Malaya 1948-1960*, Air Power Review, Volume 11, Number 1, Spring 2008, Royal Air Force, 15

RAF history of the air campaign suggests that less than 10% of insurgent casualties were created by the bombing campaign.[83] A similar result can be found in the RAF campaign conducted in Oman and Aden between 1950 and 1970. The operations during this period of time can be characterized as Britain attempting to ensure its continued influence in the Middle East by maintaining control of the Oman and Aden regions. In Oman, the British were facing a Saudi-sponsored insurgency campaign, and in Aden they were reacting to unrest created by the Imams of Yemen.[84] As discussed earlier, the RAF had been in the region for a considerable period of time conducting Air Control operations. As the insurgencies in both areas gathered strength, the RAF was called upon to attempt to quell the uprisings by direct offensive action. A positive aspect of both of these campaigns was that air power proved that its inherent flexibility, penetration, reach, and speed of response meant that it could target insurgent areas which otherwise would have escaped military action completely.[85] On the negative side, and following the trend of bombing operations in Malaya, the RAF found in a number of situations that joint air-land operations failed to secure its main objectives and, in a number of instances, were demonstrably self-defeating, resulting at best in short term pacification of insurgents at a cost of longer-term political alienation.[86] On a much smaller scale than the conflicts experienced by the USAF, the RAF also learned that air power had its limitations.

Australia

Unlike the USAF and RAF, the RAAF never became involved in a theoretical argument over the advantages of bombers versus ICBMs, simply because Australia never developed nuclear weapons. What is surprising for a country with such a small air force is the number of limited wars that Australia has decided to support with air power. As discussed earlier, Australian defense policy in the late 1950s relied on support from either the UK or the US if

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[83] Jay Gordon Simpson, "Not by Bombs Alone: Lessons from Malaya," *Joint Forces Quarterly*, Summer 1999, 95.
[84] Sebastion Ritchie, *RAF Counter-Insurgency Operations in Oman and Aden, 1950-1970*, Air Power Review, Volume 11, Number 1, Spring 2008, Royal Air Force, 50-68.
[85] Sebastion Ritchie, *RAF Counter-Insurgency Operations in Oman and Aden, 1950-1970*, Air Power Review, Volume 11, Number 1, Spring 2008, Royal Air Force, 67.
[86] Sebastion Ritchie, *RAF Counter-Insurgency Operations in Oman and Aden, 1950-1970*, Air Power Review, Volume 11, Number 1, Spring 2008, Royal Air Force, 67.

Australia's security situation ever deteriorated. This meant that Australia needed to garner that support by agreeing to become involved in its allies' limited wars. The 1959 *Strategic Basis of Australian Defence Policy* paper concluded that limited war was more likely than global war. Its stated policy objectives included the need for Australia to develop Armed Forces which could either make a prompt contribution to the defense of Southeast Asia as a part of an allied coalition, or take independent action to ensure the security of Australian territory and its sea and air approaches.[87] The RAAF's focus on strategic strike and air defense made it extremely relevant for both of these potential tasks. Australia continued to demonstrate commitment to its allies and in 1962, responding to a request from the US government to do more to oppose the spread of communism, undertook a phase of rearmament that increased the RAAFs air-defense and battlefield-mobility capabilities.[88] This rearmament resulted in a 25% increase in the size of the RAAF.

The RAAF became involved in three of the limited wars that have already been discussed: the Korean War, the Malayan Emergency, and the Vietnam War. Even though the RAAF's contributions tended to be small in scale and unlikely to really affect the outcome of the conflicts, there is some value in determining what the RAAF learned. Alan Stephens' *Going Solo* suggests that the two major lessons learned by the RAAF during the Korean conflict were: 1.) that it is enormously difficult to interdict a supply system based on peasant labor rather than mechanized transport and, 2.) the grand notions of victory through air power alone meant little if airmen were prevented from using the full force at their disposal.[89] Stephens also suggests that, given the nature of the air war in Vietnam, it seems that these lessons were not fully understood by the USAF and the RAAF. In the Malayan Emergency, the RAAF conducted bombing operations, but by the time it entered the conflict, targeting procedures had moved from attacking pin-point targets to conducting area bombing. The purpose of the area bombing was not to kill the insurgents, but rather to remove available sanctuaries. Stephens describes the outcomes as an

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[87] Stephan Fruhling, *The History of Australian Strategic Policy* (Canberra, ACT: Defence Publishing Service, 2009), 253-254, 258.
[88] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 47.
[89] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 243.

unqualified success but is extremely careful to suggest that there were some significant questions being asked about the effectiveness of the bombing campaign. He provides an alternative view to his own by quoting Richard Clutterbuck's *The Long Long War*, which states that the campaign probably did more harm than good by killing innocent people and destroying their crops and homes. In Vietnam, the RAAF conducted offensive operations from Canberra bombers and also provided battlefield-mobility transport. Stephens suggests that the results of the bombing campaign remain a controversial subject and that questions needed to be asked about the military utility of expending large amounts of high-explosive weapons on targets such as huts, footbridges and tracks.[90] In a more limited way than that of the USAF and RAF, the RAAF was also exposed to the limitations of air power during operations in limited wars.

Organizational Influences

Tami Davis Biddle suggests that at the end of both the Korean and Vietnam Wars the USAF was unwilling to accept the limitations of air power and continued to believe that it could be decisive if it were only freed from political constraints. I would postulate that this unwillingness to publically declare that air power had limitations was directly associated with the ongoing concerns of maintaining the theoretical justification for independent air forces. Though publicly the airmen blamed the political limitations placed on their operations, internally they could not help but become aware of the limitations of air power during their small wars experience. Taking the USAF as an example, James Kitfield's *Prodigal Soldiers* details how immediately after the Vietnam War, the USAF began to concentrate on air superiority and Army support missions. Kitfield details the creation of Red Flag training exercises and the professionalization of Tactical Air Command as two of the most significant changes undertaken by the USAF after Vietnam. The independent air forces did learn about the limitations of air power because immediately after Vietnam their focus shifted from strategic bombing to air superiority and CAS missions. The independent air forces were unable to publically admit to the limitations of air power because they feared the consequences. At this stage, independent air forces were still well and truly within the justification cycle. To gain

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[90] Stephens, *Going Solo: The Royal Australian Air Force 1946-1971*, 305.

independence, they had claimed that their service could be decisive; it was still too early in the history of these air forces for them to suggest that they had not been decisive or that they were not capable of always being decisive. In the turbulent period of the 1970s, within the US, the UK, and Australia, the independent air forces were not willing to risk a reduction in prestige by suggesting that air power had significant limitations. This inability to admit to the limitations of air power is directly related to concerns over maintaining a viable justification for an independent air force. Once again, the point here is not how much air power contributed to the tactical results in small wars, but rather that the air forces believed that they needed to achieve something decisive by independent action. In light of their belief that the decisiveness of air power justified their existence, their lack of performance in small wars made them nervous about their independent status. The three air forces maintained a focus on the independent aspects of air power because these continued to be the mechanisms of theoretical justification for the existence of an independent air force. Unfortunately, this unwillingness to publicly accept that air power could not always be decisive meant that they would remain in the justification cycle as they entered the next major conflict.

The Storm of Redemption

United States of America

In the years between Vietnam and the mid-1980s, the military service totally rebuilt American air superiority, with profound changes in training and technology.[91] The USAF had learned several important lessons from Vietnam and was determined to ensure that it was more prepared for the next conflict. This initial preparation did not take the form of refining the principles of strategic bombing; instead the USAF concentrated on becoming an integral part of the AirLand Battle concept, in which its main focus would be on improving air superiority capabilities and refining the Army-support mission. This transformation created a significant amount of structural and leadership changes within the USAF, a subject that will be addressed further in chapter four. The USAF improved air superiority capability by introducing the Red Flag

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[91] Richard P. Hallion, *Storm Over Iraq: Air Power and the Gulf War* (Washington, DC: Smithsonian Institution Press, 1992), 27.

series of exercises, but a great deal more was done to increase this capability. The Air Force Fighter Weapons School introduced an "aggressor" training squadron; air combat training at the Tactical Fighter Weapons Center was aggressively revamped; and new-generation fighters such as the F-15 and F-16 were purchased.[92] In April 1983, the Chiefs of Staff for the Air Force and Army signed a joint memorandum of understanding pledging that each other would work to enhance the joint employment of the AirLand Battle doctrine.[93] This co-operation created 31 initiatives that needed to be addressed to improve the integration of air and land forces. Does all of this "jointness" suggest that the USAF had let go of its desire to be decisive and had finally accepted its place as part of the joint team? The answer is "no". The first Gulf War was about to place decisiveness back to forefront of USAF advocacy for the next decade. But it was a slightly different kind of decisiveness, and ironically one brought about by joint action.

The source of this desire to be decisive can be found in the work of John Warden and the Checkmate team from July 1988 to July 1990.[94] The Five Rings Model they produced can be considered as a further refinement of the Industrial Web Theory employed by the USAAF in World War II. The major difference was that Warden's theory wouldn't try to create industrial and economic collapse; it would primarily target the leadership of a country in an attempt to paralyze its ability to command. The validity of John Warden's theory is not important to this paper. More important is how its application in the first Gulf War ignited a celebration of air power that would last for over a decade. There has a been a great deal of literature written on whether air power did or did not achieve an independent victory in the first Gulf War. Though these arguments are still ongoing, what is important for this paper was the USAF's immediate response to victory in the first Gulf War. General Merrill A. McPeak, the Air Force Chief of Staff, was quoted in the *Boston Globe* on 16 March 1991 saying "the war against Iraq marked the first time in history that a

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[92] Hallion, *Storm over Iraq: Air Power and the Gulf War,* 31.
[93] Hallion, *Storm over Iraq: Air Power and the Gulf War,* 79.
[94] John Andreas Olsen, *Strategic Air Power in Desert Storm* (Abingdon, Oxon: Routledge, 2003), 83.

field Army had been defeated by air power."[95] The air power advocates within and outside of the USAF started suggesting that the Gulf War had demonstrated a use of air power that represented a new paradigm and doctrinal shift.[96] Many stopped short of suggesting that air power had won the victory by itself, but most advocates agreed that air power achieved the most extensive and successful preparation of the battlefield in history.[97] There can be no doubt that the Gulf War and the subsequent conflict in Kosovo proved beyond doubt the utility of air power in modern warfare. Air power was enjoying an unbridled renaissance; the leaders of independent air forces might have used it as an opportunity to get out of the justification cycle. But to do so, they had to admit that surface forces had played a role in both conflicts by forcing the enemy to move and concentrate. Airmen might have realized that joint warfighting, not independent action, was the key component of their justification.

United Kingdom

While the US was busy changing focus after Vietnam, the UK maintained concentration on defending Europe from Soviet attack. The effectiveness and cohesiveness of the NATO Alliance had increased significantly and was at the heart of British defense policy.[98] There was one significant event during that period that instigated an increased interest in expeditionary operations, and that was the Falklands War in 1982. The Falklands created an issue for the RAF because the closest available air strip was Wideawake airfield on Ascension Island, 3,380 nautical miles away from the Falklands. The RAF was unable independently to provide direct fire support in the immediate vicinity of the Falklands. It was able, however, to place Harriers on the Royal Navy's aircraft carriers *HMS Hermes* and *HMS Invincible*. These aircraft performed extremely well during the conflict, but having to hitch a ride on the Navy's carriers did not exactly sell the independent capabilities of the RAF. The RAF also attempted to conduct a long-range bombing mission from Ascension Island using aging

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[95] General credits Air Force with Iraqi Army's defeat, The Boston Globe, March 16 1991, http://www.encyclopedia.com/doc/1P2-7651619.html.
[96] John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Dulles, VA: Potomac Books Inc, 2007), 229.
[97] Boyne, *Beyond the Wild Blue Second Edition; A History of the United States Air Force, 1947-2007, 318.*
[98] Frank Cooper, *The Proceedings of the Royal Air Force Historical Society*, Issue No11, February 1993, 10.

Vulcan bombers that were due to be removed from service that year and had no air-air refueling (AAR) capability at the commencement of the conflict. Though a remarkable achievement, the RAF bombing raid succeeded in putting only one stick of bombs across Stanley airfield on the Falklands. Achieving this feat had required the efforts of two Vulcan bombers and ten Victor tankers, hardly an efficient use of air power.[99] The Falklands campaign refocused the RAF on expeditionary operations and highlighted the need for deployable air force capability. Significantly, and in a manner different that the Gulf War, the Falklands demonstrated the efficacy of airpower in a joint role.

The RAF also participated in the Gulf War and, much like the USAF, in the immediate aftermath reveled in the success that air power had apparently achieved. Sir Patrick Hine, who was the Joint Commander of British Forces r, harks back to predictions of the Smuts report when he suggests that during the Gulf War, he witnessed the total vindication of air power.[100] He believes that operations in the Gulf War had proved that air power had become the dominant factor in modern warfare that Smuts had foreseen.[101] The official RAF Operation Granby website, the British name for the Gulf War, states the Gulf War was first and foremost an air power war, and the RAF's contribution to the Allied air effort was significant and distinguished.[102] It also says that by any standards, it was a decisive victory and it was a victory in which air power played the dominant part.[103] The RAF also believed that this was a watershed moment for air power and for the continued independence of the service. Like their American counterparts, British airmen had perhaps misinterpreted events, overstated their case, and missed a great opportunity to solidify their position.

Australia

Though the RAAF had been involved in the Vietnam War, it did not suffer from the same post-Vietnam turmoil as the USAF. The Vietnam War had not been popular in Australia, but because it was seen as an American war, the

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[99] Alfred Price, *Black Buck to the Falklands*, Air Power Review, Volume 5, Number 2, Summer 2002, Royal Air Force, 3.

[100] Patrick Hine, *Air Operations in the Gulf War*, ed. Alan, Stephens, *The War in the Air 1914-1994* (Fairburn, ACT: Air Power Studies Centre, 1994), 313.

[101] Hine, *Air Operations in the Gulf War*, ed. Alan, Stephens, *The War in the Air 1914-1994*, 303.

[102] RAF Operation Granby Website, http://www.raf.mod.uk/gulf/contrib.html.

[103] RAF Operation Granby Website, http://www.raf.mod.uk/gulf/conduct.html.

fallout was not as extreme. There were some significant changes to defense policy in the post-Vietnam era. The adoption of the "Defence of Australia Policy" in 1972 ensured that Australia's focus would be on defending Australia and attempting to achieve a certain level of self sufficiency. The RAAF was seen as a bigger winner from this policy, because air power was one of the only methods by which Australia could possibly hope to defend such a large, under-populated country. In line with this policy, the RAAF's air-defense and maritime-strike capabilities were enhanced with the purchase of 75 F-18s in 1981. This purchase has been widely acclaimed as the final nail in the coffin for the Royal Australian Navy's desire to replace its aging aircraft carrier, *HMAS Melbourne*. Once again, the ability of land-based air power to cover a wider region within Australia made it a more cost-effective option for national defense.

The RAAF did not deploy combat aircraft to the first Gulf War, but did deploy a number of AAR assets to support coalition operations. Even though the RAAF was not heavily involved in the first Gulf War, it also celebrated the apparent success of air power in the conflict. Sanu Kainikara, a distinguished air power specialist in Australia, provides the best summary of the air power fever that gripped each of the three independent air forces when he wrote "for the first time in the history of air warfare, the air campaign of the 1991 Gulf War displayed an almost perfect model for the employment of air power. This classic demonstration of air warfare and its merits changed the way in which air power was viewed and brought it to centre-stage with some proponents echoing the claims made almost seventy years ago that air power alone was now capable of winning wars. From there it was only a very small step for air power zealots to claim the high ground and the status for air power as the only force that could win a war on its own, with minimal collateral damage and friendly casualties."[104] Zealotry had seized the debate at precisely the wrong moment, and independent air forces were running out of time to escape the justification cycle.

Organizational Influences

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[104] Sanu Kainikara, *A Fresh Look at Air Power Doctrine* (Tuggeranong, ACT: Air Power Development Centre, 2008), 41.

At the end of the Vietnam War the USAF and the other independent air forces learned that air power had certain limitations. The USAFs response was to concentrate on roles and missions that de-emphasized the importance of independent strategic action. Concentrating on these roles and missions had made the USAF a better joint-force player. Prior to the first Gulf War, it appeared that the USAF was happy with this predominately joint role. Perhaps the USAF was finally freed from the justification cycle and was happy to exist as a co-equal service in the joint arena. This clearly was not the case, because the USAF, RAF, and RAAF could not resist using the results of the first Gulf War to further push an independent agenda. All three independent air forces missed a golden opportunity to take at least one step outside of the justification cycle. If the air forces had been more subdued in their observations of how much air power contributed to the victory in the first Gulf War, the other services might have been more willing to accept them as an essential part of the joint force.

Instead, the air forces and air power advocates decided to use the results of the first Gulf War to push for an increasing role for the air force within the defense organization. Aerospace advocates proposed that the employment of an increased array of air and space capabilities could leverage technology to address many of the operational vulnerabilities and ensure national security with far less risk to forces and at less cost than alternative approaches. The advocates suggested that aerospace power could coerce adversaries to adjust policy or deter them from taking actions in opposition to national interests. This approach has huge implications: increased air power investment; downsized land forces; and new joint concepts in which land forces support decisive air operations by herding targets, securing the front, and mopping up the battlefield.[105] This argument was sold to the governments of each of the respective countries, and in the US in particular air power was seen as the primary solution to international incidents that required the use of military force. In the 1990s, air power became a low-cost, low-commitment solution to a number of foreign-policy problems the US experienced. The arguments of the air power zealots had sold the effectiveness of independent air operations to the

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[105] Frank Finelli, "Transforming Aerospace Power", *Air power Journal*, Summer 1999, http://www.air power.maxwell.af.mil/airchronicles/apj/apj99/sum99/finelli.html.

government, and the natural seductiveness of air power theory sealed the deal. Unfortunately for each air force, that meant entrapment back inside the justification cycle; by over-selling the capabilities of air power, they now had to justify the claims they made. The historic thread in the development of air power theory had not been broken; claims of its capabilities would continue to outstrip its deliverables.[106]

Summary

It is not unusual for a new organization that enters a previously closed system with restricted resources to have to fight for its survival and justify its existence. The three independent air forces studied during this chapter are not unique in needing to qualify why as organizations they should continue to exist. A great deal earlier in history, both armies and navies needed to justify why they should exist in periods of relative peace. Within the various defense organizations of democratic countries, there will always be a struggle between the individual armed services for the limited funding available in the defense budget. Each of the services will see threats to their resource base coming from the increasing prestige and relevance of the other services, and directly from the government during periods of extreme financial crisis. Core roles and missions, which the services tend to use to build service identity, are continuously under threat of either movement to another service, political/strategic relevance, un-affordability, or technical obsolescence. Inter-service rivalries, strong advocacy groups, and extreme arguments are the results of various armed services struggling to maintain their share of the budget. What makes the three independent air forces different from the other services is that they view the battle for resources and prestige as a threat to their continued independence. The other services, who feel no threat to their independence, simply see these battles over funding as part of the normal political turmoil within the defense organization.

Independent air forces within democratic cultures continue to see threats to their independence because they remain within the justification cycle. Each of the three air forces under study needed to justify their existence at the beginning of their histories. The requirement for an independent air force is

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[106] Kainikara, *A Fresh Look at Air Power Doctrine*, 41.

neither obvious nor directly associated with the employment of air power. Air power can be applied by services other than an independent air force, and therefore, airmen needed to create reasons why independence was required. The USAF, RAF, and RAAF have at some time during their history all used or continue to use decisiveness, effectiveness, or efficiency arguments as a justification for their continued independence. Decisiveness is the ability to undertake independent action to create strategic effects. Effectiveness involves concentration under one commander as opposed to dispersal of air assets. Lastly, efficiency argues that air power can solve military issues at a reduced cost of casualties and commitment. Unfortunately, remaining within the justification cycle requires the three air forces to maintain their focus on the independent aspects of air power. In their eyes to do otherwise would raise too many questions about the need for an independent air force. In turn, this need to push the independent aspects of air power causes the air force to shy away from embracing joint concepts. In accordance with Feaver's model, the primary concern that air forces have over their independence makes it difficult for them to make a "working" or "shirking" calculation that isn't skewed towards institutional survival. Even though history may have demonstrated that air power could be at its most effective when applied within the joint context, concerns over their continuing independence forced the air forces to choose to maintain and autonomous focus, which was basically a choice to "shirk". Independent air forces that continue to feel the need to justify their existence struggle to accept their role as simply being partners in the joint fight. Put simply, they believe that if the air force's primary role is not to achieve independent results, the need for an independent air force is reduced. They cannot embrace jointness, because they believe that would eventually lead to a loss of independence.

The independent air forces studied remain within the justification cycle because they have never been able to get their operational actions to completely match the claims made by their advocates. While this is understandable at the start of their histories, when the limitations of air power were not fully understood, it becomes less understandable as the air forces grow and learn. Each of them had an opportunity at the end of the first Gulf War to

demonstrate that they had matured to a point that they felt organizationally safe. Unfortunately, a history of focusing on the independent aspects of air power, and to some degree, a strong need to say "I told you so", stopped them from being able to grasp the results of the first Gulf War as an opportunity to get out of the justification cycle. Until these three air forces can perceive threats to their resources as simply part of everyday business, and not as direct attacks on their continued independence, they will resist embracing jointness. More importantly, until air forces learn to interpret the history of warfare as an evolution of joint-force efficacy, they will continue to search for and find meaning in self-adulation. In the following chapters this paper will discuss other factors that contribute to the air forces' focus on the independent aspects of air power. Each of these will have some link to the history described in this chapter. Chapter two will examine the effects of political determination of defense budgets and force structure.

Chapter 3

The Curse of Democratic Culture

*Why does the Air Force need expensive new bombers? Have the
people we've been bombing over the years been complaining?*
George Wallace

In the first chapter, this study demonstrated that one of the primary
drivers for dispute between the services is the limited financial resources
available and the associated need to champion the cause of your service in the
political and public realms to maintain budget allocations. This public
competition for resources can be seen as a necessary evil of living within a
democratic culture. In the case of independent air forces, the side effects of this
competition can have an undesirable effect when politicization of the process
forces public justification of capabilities. The hypothesis of this chapter is that
the politicization of either the budgetary or force-structure-review processes
within democratic cultures can exacerbate the tendency for air forces to focus
on the capabilities directly linked to their independence. There is obviously a
great deal of political activity involved in every aspect of the budgetary and
force-structure-review processes, but this chapter will suggest that direct
political intervention in either process encourages the independent air forces to
champion independent capabilities. To explain this phenomenon, this chapter
will compare and contrast the budget and force-structure-review processes from
the countries of the three independent air forces being studied. The purpose of
this comparison is to show the considerable difference between a national
process that is devoid of direct political interference and one that allows direct
political intervention. It will also demonstrate that the politicization of the
budget-appropriation and force-structure-review processes compels each of the
nation's armed services to compete for support within the political realm. This
struggle for support discourages independent air forces from focusing on joint
concepts by rewarding institutional behavior that pushes independent
capabilities. This chapter will start by describing the budgetary systems and
force-structure-review processes within the United States, the United Kingdom,

and Australia, and then explain how differences in each of these processes compel a particular behavior from the nation's armed services. Though the budgetary and force-structure processes will be reviewed separately, they should be considered as a continuum in resource allocation, the budget with a more immediate focus and the force-structure-review process aimed at future resource allocation.

Prior to describing the specific national processes, a point of clarification needs to be addressed. The processes being reviewed in this chapter do not affect only independent air forces within the countries being studied. When these processes become politicized each of the armed services reacts in a very similar manner. By forcing them to compete for resources within the public domain, politicization encourages each of the services to focus on individual capabilities. The politicization of these processes encourage the air forces to compete for resources using arguments based on independent capabilities and feeds an organizational tendency to focus on these aspects. In turn, this tendency leads to a lack of enthusiasm for joint concepts.

The Budget Fight

On the surface the United Kingdom, Australia, and the United States have reasonably similar budgetary processes. Each of them have an internal departmental process that allows the various defense organizations to preliminarily assign budget allocations and then send those recommended allocations to the government for approval. This approval process normally involves some form of parliamentary review that authorizes the defense budget and then appropriates the approved funding. Also, each of the countries has an opportunity for some form of committee-based review of the appropriations awarded to defense. The process sounds fairly straight forward, but as the discussion which follows will highlight, nothing could be further from the truth.

United Kingdom

The United Kingdom's process starts with an internal review of the spending within the Ministry of Defence (MOD). The Secretary of State for Defence and the senior military leadership will decide internally what level of funding the department will request. This request will more than likely be based on an indication from the Treasury Department whether the MOD can

expect an increase or a reduction in funding. The MOD will normally attempt to align its budget request to the anticipated level of funding. This means that the internal allocation of funding is normally decided from within the MOD. Though there might be some intense inter-service rivalry for the amount of funding each of the services receives, these arguments are contained within the MOD, and a united front is presented to the general public and the rest of government. Once each of the government departments has internally determined the amount of funding it will request, a survey is conducted to determine whether each of the departments is requesting a realistic level of funding. This survey is known as the Public Expenditure Survey (PES). A Ministerial Committee on Public Expenditure reviews the results of the PES and makes recommendations to the British Cabinet on the allocation of resources between various government departments and programs.[1] These recommendations are then used to create the annual budget that is presented to the House of Commons in autumn of each year. The House of Commons will then debate the budget. It is important to note that these debates are not directly focused at the individual appropriations made within government departments. The House of Commons is not asked to approve the details of the defense budget, and there is no parliamentary mechanism that allows for audit or control of expenditure prior to the budget resolution being passed.[2] The budget is then passed through a committee process and the House of Lords, where amendments can be made, but once again, none of these processes focus in on the specifics of the defense budget.

The only parliamentary review of the defense budget is conducted as part of the Commons Select Committees process. The Defence Committee is established to monitor and to hold to account the Ministry of Defence and its associated public bodies, including the Armed Forces.[3] This is not a systematic review of the budget that was allocated to the Ministry of Defence, and because

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[1] *Preparing for the Budget – The Public Expenditure Survey*, H.M Treasury, http://archive.treasury.gov.uk/budget/1996/bg09.html.
[2] Michael D. Hobkirk, *The Politics of Defence Budgeting: A study of Organisation and Resource Allocation in the United Kingdom and the United States* (Washington, D.C.: National Defense University Press, 1983), 78.
[3] Defence Committee, UK Parlimentary Website, http://www.parliament.uk/parliamentary_committees/defence_committee.cfm.

it is conducted after the budget has been apportioned, it doesn't ferment the vigorous defense of allocations that a pre-budget review would most likely cause. The Defence Committee tends to be an opportunity for the British opposition party to gain political mileage by questioning the policies and priorities of the incumbent government. Though each of the armed services might be asked to justify certain actions they have taken or decisions they have made, they are not required to publicly justify their portion of the defense budget.

Australia

Australia, unsurprisingly, has a very similar system to the UK for determining allocations within the defense budget. It also starts with an internal process within the Department of Defence (DOD). To inform the Strategic Budget Committee (SBC), the DOD has to make an internal decision as to what level of funding will be requested and what new budget proposals will be brought forward. As with the UK system, this begins with some informal advice from the Department of Finance as to how much the DOD can expect to be allocated. Within that guidance, the services and other organizations within the DOD compete for their portion of the allocation. Once again, this can be a source of major inter-service rivalry, but this rivalry is fully contained within the DOD. Armed with the proposed allocation, the Minister for Defence then presents his recommendations to the SBC, which considers these proposals and establishes priorities for the upcoming budget.[4] Development of the actual budget is the responsibility of a cabinet sub-committee known as the Expenditure Review Committee (ERC). The primary responsibility of the ERC is to develop the budget against the background of the Government's political, social, and economic priorities. It also decides which of the government agencies' new budget proposals will be funded and by how much.[5] The recommendations of the ERC are then endorsed by a Budget Cabinet meeting that agrees to present the budget to Parliament. The budget for the DOD is presented as a portion of the entire budget, and the details of the defense

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[4] Budget 2009-2010 Website, Australian Government, http://www.budget.gov.au/2009-10/content/faq.htm.
[5] Budget 2009-2010 Website, Australian Government, http://www.budget.gov.au/2009-10/content/faq.htm.

budget are broken down in a Portfolio Budget Statement (PBS). Once again though, there is no parliamentary mechanism to systematically review the defense budget prior to the budget being approved by the House of Representatives and the Senate. Debate does occur within the houses over the priorities within the budget, but this debate is normally not specific enough to identify individual service capabilities. Appropriation bills are then passed by the House of Representatives and the Senate to enact the budget allocations.[6]

Australia also has a post-budget review of the funding allocated to the DOD. The Senate Standing Committee on Foreign Affairs, Defence, and Trade has the responsibility, through the Senate Estimates Process, of overseeing the performance of departments, including their annual budget reports.[7] As with the British system this estimates process does not require the armed services to justify their budget allocation. Questions tend to be associated with policy decisions, operational tasking, and the efficiency of defense-procurement procedures. It is very unusual during Senate Estimates for a service to publicly defend its allocation of the defense budget, a fact that makes their US service counterparts purple with envy.

United States

The United States' budgetary process, in comparison to that of the UK and Australia, differs significantly in one very important aspect. The major difference is in the opportunity for the politicization of the budget during the authorization and appropriation processes. Much like the other two countries the US Department of Defense (DoD) runs an internal process to determine the allocation of defense spending, known as the Planning Programming Budgeting System (PPBS). The planning phase establishes defense objectives and indicates the resources needed to meet these objectives. In the programming phase, the services and defense agencies develop and propose programs designed to meet the objectives of the defense guidance and the fiscal objectives of the projected defense budget. Lastly, in the budgeting phase, the proposed defense budget is submitted to the DoD Comptroller to review accuracy in cost

[6] Appropriation Bills Overview, Australian Department of Finance and Regulation Website, http://www.finance.gov.au/budget/budget-process/appropriation-bills.html.
[7] Senate Standing Committee on Foreign Affairs, Defence and Trade, Parliament of Australia Senate website, http://www.aph.gov.au/SENATE/committee/fadt_ctte/ctte_info/index.htm.

estimates, feasibility, scheduling, and consistency with established procedures.[8] Unfortunately, unlike the UK and Australia, this process does not fully resolve the inter-service rivalries that are generated by constrained financial resources. The reason for the difference is that within the US system the armed services can appeal to another referee, Congress.

Once the DoD has completed the PPBS process it submits its budget request to the President. The President, after conducting an executive review of all of the national budget priorities, submits his annual budget request for the upcoming fiscal year to Congress. The next step in the process is where the Unites States' budget system departs dramatically from that of the UK and Australia. In the US, the executive and the legislature share responsibility not only for the allocation of funds to defense, but also for the way that funds are shared among the Services and their weapons programs. In the UK and Australia, the agreed position of defense, created by their internal processes, is simply approved as part of the larger budget process. However, in the US, the agreed position of the services, created by the PPBS process, is open to Congressional review and amendment. Congress has two opportunities to debate the content of the defense budget and the associated allocation to individual services through the dual process of authorization and appropriation.[9] This process allows numerous congressional committees to become involved in the appropriation of the defense budget and creates an opportunity for politicization, which in turn leads to increasing pressure on the individual services to publicly justify their portion of that budget.

Politicization and Inter-service Rivalry

It is not difficult to understand why the addition of these Congressional committees leads to the politicization of the budgetary process. Once decisions on defense-budget allocations are opened up to a political process, they cannot help but be skewed by the political interests of the individuals and parties undertaking the review. Because of the "military-industrial complex", a substantial portion of the American economy and numerous jobs in almost

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[8] Naomi Caidon and Aaron Wildavsky, *The New Politics of the Budgetary Process* (New York, NY: Addison-Wesley Educational Publishers Inc., 1997), 221-222.
[9] Sandy Streeter, "The Congressional Appropriations Progress: An Introduction", Congressional Research Division, http://www.rules.house.gov/archives/97-684.pdf.

every congressional district are linked to the production of war-fighting capacity.[10] A former US President, George W. Bush, describes his frustration at the politicization of the defense budget by saying that "it is more than a piggy bank for people who want to get busy beating swords into pork barrels." What this means for the services is that they will more than likely have to publicly justify their portion of the defense budget. This politicization of the process leads to a phenomenon within the US that is completely foreign to military officers in the UK and Australia, the open and public debate of defense budgetary issues. In, *The Politics of Defence Budgeting*, Michael Hobkirk suggests that US military officers are used to public debate over all aspects of defense policy. The politicization of the budget process brings an associated increase in the interest of the media, which thrusts US officers into the position of advocacy for their services.[11] In a situation where defense priorities are being discussed in the public forum, complex defense issues get narrowed down to choices between specific service capabilities. A cut in one services' capabilities is instantly met with myriad of suggestions on how the other services could be reduced to save that capability. The result of this politicization of the budget process is that inter-service rivalries are played out in public, and simplification of the issues tends to lead to more extreme positions.

Though inter-service rivalry is considered to be a phenomenon experienced within most defense departments, the public airing of grievances actually goes against the natural tendency of services to co-operate in the budget process. Mark Rovner, in *Defense Dollars and* Sense, suggests that the military services' favored approach to allocating theoretically scarce budget dollars is to support each other's pet projects, making them all appear militarily vital. The best protection from the potential harms of overt budgetary competition, the services have found, is to try not to compete at all.[12] It can therefore be seen that the when politicization of the budget process forces a move away from these well developed internal dispute-resolution mechanisms,

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[10] David Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (New York, NY: Oxford University Press, 2009), 27.

[11] Hobkirk, *The Politics of Defence Budgeting: A study of Organisation and Resource Allocation in the United Kingdom and the United States*, 60-61.

[12] Mark Rovner, *Defense Dollars and Sense: A Common Cause Guide to the Defense Budget Process* (Common Cause, 1983), 34.

it actually causes more inter-service rivalry. That in turn, forces the services to make increasingly strong claims about the roles they provide. For the USAF this increases an already prevalent institutional tendency to focus on independent roles and missions. While this politicization of the budgetary process explains why services need to spend so much time justifying their budget allocation, it does not really explain why there is a tendency for them to focus on single-service capabilities. The question remains, why do services not focus on joint capabilities to justify their budget allocation?

'Joint' is not the Political Focus

The introduction of the Goldwater-Nichols Department of Defense Reorganization Act in October 1986 signaled the commencement of a strategic shift within the United States designed to improve "jointness" within the Armed Forces.[13] This political and structural focus on jointness was also echoed within the Armed Forces of the UK and Australia. Support of jointness has become an essential element of the internal and external politics of the defense departments of the three nations. Jointness is seen as the solution to poorly coordinated operational activities and the reduction of waste created by the duplication of effort among the armed services. It would therefore be logical to assume that if jointness was the new political focus, the services would be more likely to base budget and force structure arguments on joint activity. Glenn Pascall, quoting former Joint Chiefs Chairmen, General David Jones, suggests that the services do not base their arguments on jointness because, "the Defense Guidance requires so many more weapons than the budget can afford, that each service does its own wish list in its own cocoon, targeting dollars at traditional missions and short changing inter-service programs."[14] The services tacitly agree to do the absolute minimum to satisfy joint requirements and concentrate most of their efforts on securing individual service capabilities.

The services would have less chance of getting away with this sort of behavior if it was not supported by the political processes within government. The simple fact is that joint does not get the attention you would expect within political circles because it lacks a champion for joint concepts. As described

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[13] Quinn, *The Goldwater-Nichols DOD Reorganization Act: A Ten-Year Retrospective*, ix.
[14] Glenn Pascall, *The Trillion Dollar Budget: How to Stop the Bankrupting of America* (Seattle, Washington: University of Washington Press, 1985), 80.

previously, the services have a tendency to focus entirely on individual-service capabilities. Joint commanders are still members of these services and are loath to speak out against individual-service priorities. This leaves the joint chief of defense for each of the nations as the only potential champion for joint concepts. Even the joint chief tends to avoid speaking out against the agreed priorities set by the internal defense budget processes, because of the inter-service conflict that might create. For these reasons, jointness tends not to have a champion within the political realm and receives second priority to individual-service requirements.

The other major factor that reduces the importance of jointness within the political realm is that joint projects tend to be a great deal smaller in scale than the large purchases undertaken for individual-service capabilities. Joint projects tend not to involve the large amount of funding required to support major weapons system purchases, and therefore do not create the same amount of political kudos as expensive individual-service projects. Also the larger service projects tend to create a great deal more jobs and income within various political constituencies.

All of these factors increase the ability of the independent air forces to "shirk" on their joint responsibilities. Jointness is not a political priority, and therefore, there are no real organizational risks associated with non-compliance. A survey of recent force-structure documentation released in the US, UK, and Australia will demonstrate this tendency to focus on large, individual-service capabilities.

The word "joint" is used twice in the executive summary of the United States' 2010 Quadrennial Defense Review Report, and in only one of those occasions is it announcing any new form of joint capability. Within the same summary, and in stark contrast, individual service capabilities are mentioned in the guidance for force evolution and broken down in great detail in a table describing the main elements of force structure. What is even more surprising is that no mention of joint-force structure is made within the same diagram.

During the publication of the 2009 Australian Defence White Paper, the Minister for Defence authorized the release of 83 individual press releases directly related to the content of the White Paper. Of these 83 press releases,

34 of them mention an increase in individual-service capabilities and only two mention any form of joint-force structure or capability.[15] The remaining press releases were focused on defense-management issues or defense-wide capability increases that were not directly assigned to an individual service or annotated as a joint capability.

In the introduction to the British 1998 Strategic Defence Review (SDR), the Secretary of State for Defence actually spends a great deal of space mentioning both joint and individual-service capabilities and announces both the creation of a number of new joint commands and provides guidance towards a more closely integrated defense force.[16] This British example, though it would appear to go against the suggested trend, actually demonstrates when jointness can become politically relevant. In the 1998 SDR, the British government was announcing significant cuts in defense spending and force structure. The focus on joint can be seen as a smoke screen created by the British Government in an attempt to convince the British public that these cuts were not going to reduce defense capability. The British Government's argument was that these new joint commands would enhance the performance of the individual services and, therefore, allow for a reduction in the overall size of the British defense forces. Though important, this British example should be seen as an anomaly. The previous review of British defense forces conducted in 1990, known as the "Options for Change", followed the more familiar pattern of emphasizing changes in individual-service capability. In that review, the British Government announced changes to the number of Army regiments, Navy frigates and destroyers, and RAF fighter squadrons.[17] This lack of political focus on joint capabilities creates an environment which encourages the armed services to focus on individual capabilities.

The USAF Response

A review of statements by the last two USAF Chiefs of Staff demonstrate how politicization of the budget process can lead to an independent air force

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[15] Australian Government Department of Defence, "Defence White Paper", http://www.defence.gov.au/whitepaper/mr/index.htm.
[16] Secretary of State for Defence, "Strategic Defence Review", http://merln.ndu.edu/whitepapers/UnitedKingdom1998.pdf.
[17] Claire Taylor, "The Defence White Paper", Research Report no. 04/71, International Affairs and Defence Section, House of Commons Library, 17 September 2004.

concentrating on individual-service capabilities. In 2007, General T. Michael Moseley, spent the vast majority of the year fending off protests on major acquisition projects and lamenting a lack of funds.[18] In the search for additional funding for the USAF to replace aging aircraft, General Moseley consistently used independent capabilities to justify an increase in the USAF's budget. In response to the threat from an increased focus on counter-insurgency, General Moseley said "the fight we're waging in Iraq and Afghanistan is not our only concern. It is not the only challenge to this country. We cannot afford to become target-fixated on counterterrorism or insurgency. We cannot completely focus on Iraq or Afghanistan and forget about the potentially global complexities in competitions in the future."[19] To emphasize the importance of the independent capabilities of air power he said "that modern air [and sea] power, which have taken a back seat to ground forces during the current operations in Iraq and Afghanistan, are crucial to dissuading and deterring worldwide threats. If you don't have that air and sea power, then you become a junior varsity, so the United States military in today's world has to be able to walk and chew gum at the same time."[20] General Moseley's mention of sea power in the same statement is an interesting display of inter-service dynamics. Both the USAF and the United States Navy (USN) consider the US Army's domination of counter-insurgency as a threat, and it would appear as if they were willing to co-operate to play down its importance.

General Norton A. Schwartz, General Moseley's successor, probably entered the job with an understanding that one of the potential reasons General Moseley had been fired was because of his refusal to focus on the wars at hand in Iraq and Afghanistan at the expense of continued focus on the conventional

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[18] Gayle S. Putrich, "USAF seeks rebound for turbulent 2007", *Defense News*, 17 December 2007, http://www.defensenews.com/story.php?i=3281969.

[19] John T. Bennet, "China, Iran Top USAF's Threat List: Anti-Terror Effort Takes Backseat in Procurement Priorities", *Defense News*, 20 February 2007.

[20] Megan Scully, "CongressDailyPM - DEFENSE - Chief Says Air Force Must Recover Funds Diverted To Army", *Congress Daily*, 24 April 2007, http://www.nationaljournal.com/congressdaily/dj_20070424_5.php?mrefid=site_search&li=false.

threats of China and Russia.[21] Some believe that Moseley was dismissed because he continued to push the independent roles of the USAF during budget considerations, rather than its contribution to the joint fight. Even though General Schwartz replaced an officer who had been dismissed for not having enough joint focus, in May 2009 his statement to the Senate Armed Services Committee perhaps highlights how entrenched the independent focus is during budget discussions. His statement listed the top ten core air force functions for 2010. Of the first five core functions listed, four are independent capabilities undertaken by the USAF (Nuclear Deterrence Operations, Air Superiority, Space Superiority and Global Precision Attack).[22]

These examples demonstrate how the politicization of the Unites States' budget process causes the USAF to focus on independent capabilities. By creating an environment that rewards the overt advocacy of independent-service capabilities, the US system tends to push its armed service towards extremes of position and narrow-service focus. Though the budget processes within Australia and the UK are still capable of creating intense inter-service rivalry, the lack of politicization of the process ensures that this rivalry normally remains outside of the public sphere. The politicization of the budget process creates a situation that compels and rewards a service that focuses on independent capabilities, a situation that does not change when the three nations conduct their force-structure-review processes.

Force Structure Review

As discussed in the introductory remarks to this chapter, the force-structure-review process should be seen as a longer-term budgetary process. The factors that affect the armed services during the budget process are still prevalent during any force-structure review, and the services will still tend to push their independent capabilities for the all the same reasons that they did during the budget process. Therefore, the reason to treat the force-structure-

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[21] James Joyner, "Air Force Secretary, Chief of Staff Fired" *Outside the Beltway*, 5 June 2008, http://www.outsidethebeltway.com/archives/air_force_secretary_chief_of_staff_fired/
[22] Senate Armed Services Committee, Department of the Air Force presentation to the Senate Armed Services Committee United States Senate Fiscal Year 2010 Air Force Posture Statement http://armed-services.senate.gov/statemnt/2009/May/Donley-Schwartz%2005-21-09.pdf.

review process as a separate entity is to demonstrate how the politicization of the process can have a major effect on the level of institutional security that independent air forces perceive. The major difference between the budget and force-structure-review processes can be seen in the finality of the decisions being made. Though budgetary decisions can force the reduction or cancellation of a specific capability, these decisions do not tend to be as final as policy decisions that are stated as part of a force-structure-review. The armed services tend to be more nervous about a force-structure-review because a major shift in policy or focus could seriously affect one of their independent capabilities. This chapter will now turn to the specifics of the force-structure-review processes within each of the three nations being studied.

United States

While the Unites States had the most politicized budgetary process in comparison to the UK and Australia, this is no longer the case during the force-structure-review process. The Quadrennial Defense Review (QDR) provides an advantage to the United States' Armed Forces because it is conducted at regular intervals and is therefore not normally directly associated with a major shift in government policy. This is not the case in the UK and Australia. While there is still a great deal of political engagement involved during the QDR process, much like the budget it is seen as part of normal defense business. The Congressionally directed QDR requires the DoD to undertake a wide-ranging review of strategy, programs, and resources. Specifically, the QDR is expected to delineate a national defense strategy consistent with the most recent National Security Strategy by defining force structure, modernization plans, and a budget plan allowing the military to successfully execute the full range of missions within that strategy. The report will include an evaluation by the Secretary of Defense and Chairman of the Joint Chiefs of Staff of the military's ability to successfully execute its missions at a low-to-moderate level of risk within the forecast budget plan.[23] The process is seen as an internal review conducted by the DoD, which then reports to Congress. While there can be no doubt that the QDR needs to align itself with the policies of the current

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[23] Jeffery D. Brake, CRS Report for Congress, *Quadrennial Defense Review (QDR): Background, Process, and Issues*, http://www.globalsecurity.org/military/library/report/crs/RS20771.pdf.

administration, the process is open to internal negotiations within the DOD and, in comparison to the British and Australian processes, is less prone to a significant change in policy. Though the QDR is open to congressional review, the United States' armed services are used to this process because of their contact with Congress during budget appropriations and therefore have the internal response and external communication organizations in place to deal with this review. While the QDR process is not as politicized as the force-structure-review processes in the United Kingdom and Australia, there is still a definite political flavor to the document. As previously demonstrated, the QDR tends to reflect the lack of political focus on jointness, and instead focuses on those key individual service capabilities. While the QDR is a stressful time for the United States' armed services, this stress pales in comparison to the panic felt by their British and Australian counterparts.

United Kingdom

A Strategic Defence Review (SDR) and associated Defence White Paper are not regular occurrences within the United Kingdom. They are completed when the British Government determines that a review is required. These reviews are normally associated with either a significant change in strategic conditions or an expected change in government policy. Though the SDR might be completed partially by the MOD, it is not seen as a report by the Ministry, but rather a statement by the British Government on its future defense policy. The current Secretary of State for Defence described the SDR for 2010 as a process that will involve a detailed examination of a range of issues including the lessons we have learned from recent operations, the changing character of conflict, and the requirements for and aspirations of the Armed Forces.[24] It is not difficult to imagine how all of this can cause major consternation within the British Armed Forces. For them, the SDR is not a normal part of defense business and is seen as an opportunity for each of them to lose major service capabilities due to a change in strategic direction or the anticipated level of defense spending. They do not have the same amount of control over the process that the QDR provides the Unites States' services, and any lack of

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[24] Ministry of Defence, "Strategic Defence Review Outlined", http://www.mod.uk/DefenceInternet/DefenceNews/DefencePolicyAndBusiness/StrategicDefenceReviewOutlined.htm.

control causes a great deal of concern. In the United Kingdom these concerns are magnified because of the historical precedence that previous reviews have created. The first chapter detailed how the 1957 Defence White Paper cut defense spending and capability dramatically and how the 1998 SDR also cut defense spending. In the UK, most people within the armed services equate an SDR with an expected cut in defense spending. The SDR is a political process within the UK, normally associated with a cut in defense spending, and therefore is seen as a major threat to the capabilities of each of the services. This politicization of the SDR process can have dramatic effects on the inter-service rivalry within the British Armed Forces and forces the RAF to focus on the independent aspects of air power. A textbook example of this reversion to independent arguments can be seen from the following example, which demonstrates that the politicization of the force structure-review-process can create a perception of serious threat within a military organization.

'Fights On' in the UK

In July 2009, the British Government announced that it would undertake a SDR. Though not specifically stated, the general opinion as to why the SDR was being undertaken was the dire financial situation within the UK. Immediately after the SDR was announced, newspaper reports started predicting a cut in defense spending of about 10 to 20 per cent.[25] As the previous review of history demonstrated, as soon as large cuts in defense spending are predicted, inter-service rivalry increases. Newspaper articles started appearing suggesting that Britain could no longer afford three separate services and that consideration should be given to "closing the RAF."[26] The Chief of Defence Staff started an wild fire when he suggested that the "merger of the Armed Forces should be debated" and that "it was only 'plausible' that they would all exist separately in ten years' time."[27][28]

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[25] Tom Coghlan, "The future of defence part three: The RAF", *Times Online*, 3 February 2010, http://www.timesonline.co.uk/tol/news/politics/article7012792.ece.
[26] Iain Martin, "Will the Tories axe the RAF?", *The Wall Street Journal*, 18 September 2009, http://blogs.wsj.com/iainmartin/2009/09/18/will-the-tories-axe-the-royal-air-force/.
[27] James Kirkup, "Merger of the Armed Forces 'should be debated'", *Telegraph.co.uk*, 03 Feb 2010, http://www.telegraph.co.uk/news/newstopics/politics/7037771/Merger-of-Armed-Forces-should-be-debated.html.

To fully understand the impact of the service chiefs' responses, it is important to note that it is very unusual for a serving British officer to make any form of public comment on inter-service arguments. Brian Hobkirk describes how serving British officers are not allowed to publicly discuss defense policies still being formulated, nor are they to discuss matters of controversy between political parties or anything that raises doubts of the impartiality of the Armed Forces.[29] This makes it all the more amazing that General Sir David Richards, the head of the Army, began publicly questioning the value of new fighter jets in an era of "counter-insurgency" and guerilla warfare.[30] In response to all of these threats, the RAF replied in a manner wholly reminiscent of arguments used in chapter one by emphasizing the independent roles of air power. The RAF Chief of Air Staff (CAS) argued that to "invest in Britain's air capabilities was a cost-effective way to deter, to provide rapid military options for politicians and to avoid expensive and lengthy ground wars."[31] He also said that "air and space power is not an optional luxury that can be added to an erstwhile military operation on the ground or at sea, it provides the essential foundation for any sort of military endeavor."[32] The RAF not only stayed on the defensive, using the argument that air power is more effective under one independent air force, but publicly suggested that it would be more efficient if the RAF ran all combat jet operations, which would mean transferring the Royal Navy's jets to the RAF.[33] The politicization of the SDR

[28] Ian Drury, "Could this be the end of the RAF? Military chief refuses to rule out merger with Navy as cuts loom", *Mail Online*, 4 February 2010, http://www.dailymail.co.uk/news/article-1248171/Green-paper-reveals-defence-budget-cuts-new-alliance-France.html.

[29] Hobkirk, *The Politics of Defence Budgeting: A study of Organisation and Resource Allocation in the United Kingdom and the United States*, 59.

[30] Kirkup, "Merger of the Armed Forces 'should be debated'", *Telegraph.co.uk*, 3 Feb 2010.

[31] Alex Barker, "Air Force Chief defends role and spending", *Financial Times*, 12 Feb 2010, http://www.ft.com/cms/s/f5061c0a-1a74-11df-a2e3-00144feab49a,Authorised=false.html?_i_location=http://www.ft.com/cms/s/0/f5061c0a-1a74-11df-a2e3-00144feab49a.html&_i_referer=.

[32] James Kirkup, "RAF chief: don't cut fighter jets", *Telegraph.co.uk*, 15 Feb 2010, http://www.telegraph.co.uk/news/newstopics/politics/7245465/RAF-chief-Dont-cut-fighter-jets.html.

[33] Sean Rayment, "RAF chief predicts controversial takeover of Royal Navy air power", *Telegraph.co.uk*, 15 Feb 2010, http://www.ft.com/cms/s/f5061c0a-1a74-11df-a2e3-00144feab49a,Authorised=false.html?_i_location=http://www.ft.com/cms/s/0/f5061c0a-1a74-11df-a2e3-00144feab49a.html&_i_referer=.

process within the UK has caused the British Army and RAF to publicly react to threats to their individual service capabilities. The RAF responded by emphasizing the independent roles of air power and the efficiency of air power under one independent air force.

Australia

The Australian system can be seen as a mid-point between the relative lack of politicization in the US system and the extreme politicization of the system in the UK. An Australian Defence White Paper is not a scheduled event and is undertaken when a review is determined necessary by the Australian Government. Once again the timing of these reviews tends to serve either a political end or is undertaken when a major change in defense policy is expected. In 2008 the Australian Minister for Defence described the upcoming 2009 White Paper as a process that will help the government make fully informed and cost-effective decisions about the military capabilities needed to defend Australia and promote its interests.[34] Unlike the UK, Australian servicemen do not naturally equate a Defence White Paper with an immediate reduction in the amount of defense spending. For Australian armed services, the White Paper is a government policy document that provides guidance on priorities for defense procurement and force structure. The White Paper is a product of the DOD, but its outcomes are driven by the policy direction of the Australian Government. The fact that the document is created by the DOD tends to reduce the amount of politicization of the White paper process, which means that the RAAF does not have to go the extremes of justification that the RAF must. The White Paper process can create intense inter-service rivalry, but because the White Paper is predominately authored by the DOD, these rivalries tend to be contained within the department. The big issue for most of the services during the White Paper process is the massive increase of coverage of defense issues within the media and the associated public debate over certain service capabilities. This tendency can also be found during the British SDR process. Neither Australian nor British armed services are used to this level of public debate over their service capabilities and do not have the internal

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[34] Australian Government Department of Defence, "Defence White Paper", http://www.defence.gov.au/whitepaper/mr/index.htm.

response and external communication organizations in place to deal with it in the same manner that the United States' services do. This public debate can cause a great deal of heartache for Australian services because they lose control over the force structure review process when it becomes over-politicized.

An example of this public debate during the White Paper process in Australia can be seen in the heated arguments over the proposed purchase of the F-35 Joint Strike Fighter (JSF). In the years leading up to the White Paper questions started to be asked about the appropriateness of Australia purchasing the JSF. The main concerns centered on the phenomenal price tag associated with the project and that Australia may no longer require an air superiority fighter.[35] In reply to these accusations the RAAF could have answered by stressing the "joint" aspects of the aptly named JSF, but instead it focused heavily on the independent capabilities the aircraft would support. Air Chief Marshal Angus Houston argued the requirement for the JSF by suggesting that "for Australia to sustain a decisive combat edge in the air over coming decades, we need to move to the more advanced capabilities of a fifth-generation aircraft over the next decade."[36] In an article defending the JSF, Air Chief Marshal Houston wrote that "air superiority is at the heart of Australia's military strategy. We need to be able to ensure that the full range of ADF operations land and maritime can be conducted without threat from adversary air operations."[37] When the RAAF sensed a threat to the funding of a key air force capability, their tendency was to respond in a manner that focused on the independent capabilities of the platform.

The review of three nations' budget processes completed earlier in this chapter demonstrated how the politicization of the United States' process led to an increase in the amount of inter-service rivalry and the extremes that each of the services would go to defend their individual service capabilities. In the force structure review process, the tables have been turned, because the United States has a regular process that is mostly run by the DoD, the QDR is not seen as a considerable threat. The SDR and to a lesser extent the White Paper

[35] House of Representatives, Defence Legislation Bill 2008, Second Reading, 10 February 2009, 761-763.
[36] Andrew Dawson, "A Force to Be Reckoned With," About the House, March 2006, 35.
[37] Air Marshal Angus Houston, "Is the JSF Good Enough?" Australian Strategic Policy Institute, August 2004, 1.

processes in the UK and Australia respectively are predominately political events and are therefore open to politicization. This associated increase in public debate can lead to independent air forces making force-structure arguments based on individual-service capabilities and in particular the independent roles they undertake.

Summary

In most countries, the armed services are in a continual struggle to maintain their share of the defense budget. In democratic cultures this struggle takes on more serious proportions when the services are exposed to the politicization of both the budget and force-structure-review processes. This politicization tends to force all of the services towards a more extreme advocacy of independent-service capabilities. While "jointness" has become the stated policy of most modern defense forces, it still struggles to find relevancy within the external political sphere because it lacks the "money trail" that follows the much larger individual-service capabilities. Politicization tends to reward services that are capable of selling their independent capabilities in a politically savvy fashion. While all of the armed services have to operate under these conditions, independent air forces do have one factor that tends to push their projects further into the public limelight. That factor is the immense cost of most major air force projects. As discussed earlier, the JSF project within Australia is worth A$16 billion and is by far the most expensive defense project ever undertaken by the Australian Defence Force. When you consider that this figure is for only 100 aircraft, it is not surprising that it doesn't take long for people to raise questions about the need for such expense. A large proportion of the Australian community believes that this money could be better spent on social welfare or national health systems. These opinions only make it harder for the RAAF to stay out of internal Australian politics and to publicly justify the need for the JSF.

So what effects does the politicization of resource allocations have on independent air forces? The main effect it is to reinforce the already prevalent organizational tendency to focus on independent-service capabilities. The three independent air forces being studied are all still within the justification cycle, and this means that they still have a major problem distinguishing between

threats to their independence and normal inter-service budgetary conflict. Politicization only adds to the problem by encouraging a narrow individual-service focus. Air forces are already concerned about embracing "jointness" because of a perceived threat to their independence, and budgetary processes reinforce this behavior. In terms of Feaver's model, the lack of political interest in jointness, and a budgetary system that tends to reward an independent focus, makes the "working" or "shirking" calculation easier for the independent air forces. If the budgetary process fails to punish the air forces for choosing to "shirk", there is less risk associated with maintaining their independent focus. As Feaver predicted, for political reasons the budgetary process is very rarely used to punish the services when they "shirk". To enable the independent air forces to step outside the justification cycle, they need to be convinced that their existence does not rely on the continued importance of independent service capabilities. Politicization does not reward a move away from independent-service capabilities, and therefore, it helps to maintain the air forces' focus on the independent aspects of air power.

Chapter 4

The Creation of an Organizational Anomaly

99 Knights of the air, ride super-high-tech jet fighters. Everyone's a superhero, everyone's a Captain Kirk. With orders to identify, to clarify, and classify, Scramble in the summer sky, as 99 red balloons go by.

Kevin McAlea

To fully comprehend the complexity involved in determining the major causes of why air forces within democratic cultures continue to focus on the independent aspects of air power, it is essential that this study does not stop at merely analyzing historical influences and budgetary concerns. Though these two aspects provide a great deal of insight into some of the primary causes of this independent focus, they do not factor in the more subtle effects of organizational culture. The purpose of this chapter will be to highlight those aspects of organizational culture that help to create and enable a continued focus on the independent aspects of air power. Of equal importance to identifying the problem is demonstrating the damaging effects that problem can cause. This chapter will also highlight how maintaining such a narrow focus can hurt the organization, when a shift in strategic priorities brings into question the relevance of that independent focus. When there is a significant disconnect between the focus of an organization and the strategic realties within which it operates, an organizational anomaly can be created, which can cast doubt on the appropriateness of the institution's direction.[1]

When discussing the organizational culture of independent air forces, this study will treat the RAF, RAAF, and USAF as a single cultural entity and refer to it as the "air force culture". This no doubt creates a danger of over-generalization; while each of these organizations is very different due to the historical influences and the national character of each force, this study will demonstrate that all three air forces share a number of prevalent cultural features. Where possible, this chapter has used sources from all three

countries to ensure that the discussion remains representative of their corresponding independent air forces.

Organizational Culture

There has been a great deal of literature dedicated to the subject of organizational culture. Much of it credits an organization with the capability of creating an internal culture based on fundamental beliefs and values. Gareth Morgan, in *Images of Organization*, suggests that organizations have patterns of belief or shared meaning and that they create operating norms and rituals that exert a decisive influence on the overall ability of the organization to deal with challenges.[2] The psychologist Edgar Schein defines organizational culture as a pattern of shared basic assumptions learned by the group as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid.[3] Equally important to the organizational culture of air forces is Schein's belief that the leadership of an organization is intrinsically interwoven in the creation and maintenance of shared beliefs. Schein states that "the only thing of real importance that leaders do is to create and manage culture, with the ultimate responsibility to destroy that culture when it becomes dysfunctional."[4] It is important because Schein's assertion suggests that the leadership of an organization can have a significant impact on its internal culture. Before moving on to discuss the major attributes of air force culture, there is one more aspect of organizational theory that needs to be addressed. In *The Masks of War*, Carl H. Builder suggests that organizations have distinct and enduring personalities of their own that govern much of their behavior.[5] Builder suggests that military organizations create specific personalities, or as he calls them "masks of war", to cover the pursuit of their own self-interests. He suggests that "institutional self-interests are most evident in peacetime and among the senior officers of the services. It is the

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[2] Gareth Morgan, *Images of Organization* (Thousand Oaks, CA: Sage Publications, 2006), 125.

[3] Edgar H. Schein, *Organizational Culture and Leadership*, 3rd ed. (San Francisco, CA: Jossey-Bass Publishers, 2004), 17.

[4] Schein, *Organizational Culture and Leadership*, 3rd ed., 11.

[5] Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore, VA: The John Hopkins University Press, 1989), 1.

'fathers' of the institution who must look after their institution's well being, for they have been entrusted with its care."[6]

In summarizing this organizational theory, a picture is formed of an organization that creates certain norms, beliefs, and practices to deal with the internal and external challenges it faces. The responsibility for maintaining or amending this culture typically lies with the leadership of the organization, and within the military, this culture is designed to support the self-interests of the organization. While there are many components to air force culture, two specific facets are important to the creation of a focus on the independent aspects of air power: the tribal nature of air force leadership and a binding technological focus.

Tribal Leadership

As Carl H. Builder describes it, "the ownership of the air force is clearly in the hands of the pilots."[7] Builder goes on to suggest that the air force has divided its officers into two groups that stand on different levels, a two-plateau or two-caste system of status, which divides pilots and every other officer.[8] This is hardly surprising for an organization which is almost completely focused on flying. Not only is the air force leadership made up of almost entirely of pilots, it also tends to be from a limited number of specific aircraft types. The reason why air force leadership comes from such a narrow group of pilots is explained by Arnold Kanter in *Defense Politics*: "…relations among participants within the service groups respond to changes in their environment: reigning intraservice groups are displaced by internal challengers who can better exploit the new situation in which the service finds itself."[9] Basically, Kanter is suggesting that the leadership within an air force comes from the group of pilots, often referred to as a "tribe," that is able to make itself the most strategically relevant.

Air forces tend to focus on the independent roles that they consider essential to remaining strategically relevant, to justify their independence, and to ensure a lion's share of the budget. Traditionally this has meant that the leadership group within these air forces has come from either the bomber or

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[6] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 12.

[7] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 26.

[8] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 26.

[9] Arnold Kanter, *Defense Politics: A Budgetary Perspective* (Chicago, IL: The University of Chicago Press, 1979), 108.

fighter fraternities. In 1954, two Australian air force officers argued that the "hard core" of an air force is its fighters and bombers and that every endeavor should be made to employ the RAAF's future leaders in those roles.[10] Within the air force, not all pilots are considered equal. Air force leadership tends to be dominated by those pilots who fly aircraft types that are perceived to be at the heart of the air force's core roles. In line with Kanter's theory, the air force tends to promote those officers engaged in activities that it believes are essential to the organization's survival. Therefore, if the air force believes that its independent roles are the most important aspect of its organization, officers from within those roles will tend to be placed in leadership positions. Even though the selection process for the "Chief" of RAF, RAAF, and USAF is a political decision, the pool from which the politicians can select has already been narrowed by promotion decisions made within the organization. If the only candidates the politicians encounter are from the "hard core" of the air force, it is not surprising that most of the senior air force leaders tend to be either fighter or bomber pilots. A review of the current air force leaders within the RAF, RAAF, and USAF demonstrates that this historical trend is still the case. Out of ten senior leadership positions within the three air forces, seven are occupied by officers who have either a fighter or bomber background.[11]

It is also important to note that this desire to remain strategically relevant can also create divisions within the members of the "hard core" of the air force. Perhaps the most startling example of this division between fighter and bomber pilots occurred within the USAF in the early 1980s. In *The Rise of the Fighter Generals*, Mike Worden describes how the leadership of the USAF transitioned from bomber pilots to fighter pilots because of a change in the strategic situation.[12] James Burton describes how deep-seated philosophical

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[10] Alan Stephens, *Power Plus Attitude: Ideas, Strategy and Doctrine in the Royal Australian Air Force 1921-1991* (Canberra, ACT: AGPS Press, 1992), 129.
[11] Sources taken from biographies at http://www.raf.mod.uk/organisation/cas.cfm, http://www.raaf.gov.au/Leaders/index.aspx and http://www.af.mil/information/afchain/index.asp. Positions selected are: RAF Chief of Air Staff, Assistant Chief of Air Staff and Commander –in-Chief Air Command, RAAF Chief of Air Force, Deputy Chief of Air Force and Air Commander Australia, USAF Air Force Chief of Staff, Vice Chief of Staff, Commander Pacific Air Forces and Commander USAF Europe.
[12] Mike Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982*, (Maxwell Air Force Base, AL: Air University Press, 1998).

differences between the "Fighter Mafia" and the senior leadership of the Air Force led to a polarization of the organization.[13] The early 1980s was a turbulent period of time for the USAF because the apparent limitations of air power in the Vietnam War (and the Korean War) had forced the organization to realign its strategic direction away from strategic bombing and towards the roles of air superiority and close air support. With this strategic realignment came a very distinct change in USAF leadership, prior to 1982 every Chief of Staff had been a bomber pilot, after 1982 every Chief of Staff was a fighter pilot. A trend that continued until 2008 with the appointment of the current USAF Chief of Staff, General Norman A. Schwartz, who has a transport and special operations aircraft background. A similar trend can be found in the RAF and RAAF, in the last 30 years only one RAF Chief of Air Staff has not come from an air combat background, and nine out of the last 12 RAAF Chiefs of Air Force have been either fighter or bomber pilots. [14][15]

In discussing air force leadership, Alan Stephens describes how the effect of this tribalism tends to create a command structure that it distinctive for the narrowness of its gene pool.[16] This narrowness within the leadership creates the potential for a myopic view of the priorities within the organization. A leadership group that consists almost entirely of one tribe cannot help but focus on those "tribal" aspects of air force capability. This bias doesn't necessarily have to result from a conscious decision-making process. Irving Janis in *Groupthink* warns that when a group of policy-makers displays certain traits, we can expect the groupthink syndrome to emerge as the members are working collectively on important policy decisions.[17] The groupthink syndrome that Janis refers to is a mode of thinking that people engage when they are in a deeply cohesive group and when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action.[18] With the

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[13] Burton, *The Pentagon Wars: Reformers Challenge the Old Guard*, 27.
[14] Royal Air Force, Chief of Air Staff, http://www.raf.mod.uk/organisation/cas.cfm.
[15] Royal Australian Air Force, Former Chiefs of Air Force, http://www.raaf.gov.au/leaders/formerchiefs.aspx.
[16] Alan Stephens "Command in the Air," in *Air Power Leadership: Theory and Practice*, ed. Peter W. Gray and Sebastian Cox (Joint Doctrine and Concepts Centre, Wiltshire: London: The Stationary Office, 2002), 5.
[17] Irving L. Janis, *Groupthink* (Boston, MA: Houghton Mifflin Company, 1982), 176.
[18] Janis, *Groupthink*, 9.

leadership group within air force being from such a narrow field, it is hardly surprising that their focus tends to be on those "hard core" functions of the air force. Ultimately this leaves you with an organization that appears to be motivated to support a couple of very narrow aspects of air power, the maintenance of air superiority and the delivery of kinetic weapons for strategic effect. Group think is a symptom of maintaining such a narrow leadership group, and the effects of groupthink can be considered one of the causes of the air forces' focus on the independent aspects of air power. Observant readers will have already recognized that these core roles are also the same ones that are commonly used to justify the need for an independent air force.

Technological Focus

The second aspect of culture that adds to a focus on the independent aspects of air power is the air force's close bond with technology. Builder describes the air force's obsession with technology as an almost religious experience, suggesting that the air force could be said to worship at the altar of technology.[19] Builder also suggests that the air force has created this focus on technology as a method of maintaining independence. He suggests that the air force believes that if it is to have a future of expanding horizons, it will come only from understanding, nurturing, and applying technology.[20] Builder is not the only writer to suggest an almost spiritual connection between the air force and technology. Philip Meilinger describes how the air force has always had a forward gaze, and that technology became the third pillar of air power theory, alongside history and doctrine.[21] A more practicable suggestion as to why the air force is so enamored with technology, based on historical precedence, comes from Glenn Pascall who suggests that "in World War II there seemed to be an entirely positive relationship between advanced design and capability. Technology extended the 'reach' and effectiveness of the human combatant."[22] Pascall goes on to say that he believes that this historical link has long since faded and that the technology push seems to have taken on a life of its own.

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[19] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 19.
[20] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 19.
[21] Philip Meilinger "The Development of Air Power Theory," in *Air Power Leadership: Theory and Practice,* ed. Peter W. Gray and Sebastian Cox (Joint Doctrine and Concepts Centre, Wiltshire: London: The Stationary Office, 2002), 92.
[22] Pascall, *The Trillion Dollar Budget: How to Stop the Bankrupting of America*, 93.

The importance of technology to air force culture is still extremely evident in the three independent air forces being studied. In a recent speech to the Air Force Association, General Schwartz harped back to the glory days of General Hap Arnold's "Technology Horizons" and stated that the USAF needed to continue to identify the most promising technologies it could adopt to give it the flexibility to respond to the changes in all aspects of warfare.[23] The RAF Chief of Air Staff, Air Chief Marshal Sir Stephen Dalton, recently said "the development of military aviation, supported by emerging technology, means that air power has been consistently developing and maturing over the last 20 years in particular, and can now make the critical, precise and designed impact that theorists such as Douhet, Mitchell – and, of course, Lord Trenchard - have envisaged since the dawn of aviation."[24] The current version of the RAAF's *Air Power Manual* states that "keeping the Air Force's air power at a level that continues to offer the versatility, responsiveness and capability edge required to be effective in operations requires an extensive investment in technology."[25]

This affinity with technology manifests itself within the air force as a constant desire to remain on the cutting edge. History has taught most modern air forces that it doesn't pay to be second best in the air, and technology is the major source of advantage in aerial combat. Builder would agree with that assessment, suggesting that in measuring itself, the air force is likely to speak first of the kind and quality of its aircraft.[26] To have a "real" air force, you need to be equipped with modern aircraft that are capable of conducting aerial combat and precision targeting. Perhaps the most recent example of how much an air force relies on its combat aircraft to define its relevance in warfare can be seen with the demise of the Royal New Zealand Air Force's (RNZAF) air combat capability. In May 2001 the New Zealand Government decided to remove the air combat capability from the RNZAF by cancelling the purchase of F-16s to

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[23] General Norman A. Schwartz, Chief of Staff, US Air Force (address, Air Force Association Convention, Washington, D.C., 15 September 2009).

[24] Air Chief Marshal Sir Richard Dalton, Chief of Air Staff, Royal Air Force "Combat Operations: The Asymmetric Advantage of Air Power" (RUSI Lord Trenchard Memorial Lecture 2009). This statement is important not only because of its link to technology, but also the direct reference to earlier air power theorists. In this speech the RAF CAS is basically suggesting that air power can be the independent war winner that Douhet, Mitchell and Trenchard suggested.

[25] Australian Air Publication AAP 1000-D, *The Air Power Manual*, March 2007, 99.

[26] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 21.

replace the aging Skyhawk aircraft. The RNZAF Chief of Air Force at the time, Air Vice-Marshal John Hamilton, acknowledged the deep disappointment that the decision created among his serving members.[27] Hamilton also said that the loss of its fighter jets had cracked the credibility of New Zealand' s air force and seriously compromised its ability to operate its remaining planes, and added that the government's decision to close the air force's combat wings had "severely dented" the force's public image.[28] For the leaders of the RNZAF having an air combat capability meant that they had a "real" air force. In their eyes, the loss of this capability reduced the relevance of the RNZAF.

Air force culture is wedded to technology because modern air forces define themselves by the type of aircraft they fly. Remaining on the cutting-edge of technology ensures that they maintain their advantage in aerial combat, but equally important, it ensures that their air force is taken seriously within the international brotherhood of airmen. There is one big problem with all this technology; it costs money, vast amounts of money.

A Question of Choice

The effects of maintaining a focus on the independent aspects of air power are magnified by two factors: the immense cost of advanced aviation products and the fact that service budgets are not unlimited. In an attempt to highlight the ludicrous cost of modern combat aviation, Norman Ralph Augustine, a renowned aerospace businessman, wrote the following law: in the year 2054, the entire defense budget will purchase just one aircraft. This aircraft will have to be shared by the Air Force and Navy 3-1/2 days each per week except for leap year, when it will be made available to the Marines for the extra day.[29] Augustine was obviously going to extremes to make his point, but his view is still valid. Pascall explains that building a front-line fighter plane in an era of advanced technology is not a line of business which firms begin easily

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[27] Paul Chapman, "New Zealand scraps air force war planes," Telegraph.co.uk, 09 May 2001, http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/newzealand/1329673/New-Zealand-scraps-air-force-warplanes.html.

[28] AP Worldstream, "New Zealand air force threatened by dwindling staff after losing fighter jets," *Associated Press,* 13 June 2002, http://www.highbeam.com/doc/1P1-53588588.html.

[29] UK Defence Forum – Defence Viewpoints, "Augustine's Laws," http://ukdf.blogspot.com/2008/08/augustines-laws.html.

or abandon casually. Highly specialized skills, knowledge, and equipment are required. In practical terms, there is little chance for other producers to enter this field. To hurdle the requirements of competence from a dead start is nearly impossible.[30] The lack of competition within the aerospace industry identified by Pascall means that the cost of modern day combat aircraft is spiraling ever upwards. The next generation of combat aircraft, the Joint Strike Fighter, is expected to cost approximately $137 million per airframe.[31] The problem is that the air force's portion of the defense budget isn't increasing in the same exponential manner.

The tribalism of leadership and an obsession with technology normally leads to the air force focusing primarily on the high end of combat-aircraft capability. This is not a problem when an air force can afford all of the capabilities it requires, but as the cost of combat aircraft goes up, air forces are required to make decisions on which capabilities remain their priorities. Having a leadership group that is from one narrow area of air force capability tends to ensure that "hard core" capabilities remain the focus. Adding an obsession with technology to the mix simply makes these choices easier. The following two examples highlight the current air force tendency to focus on air combat capabilities. In 2009, the USAF requested a budget of $5,501.6 million (56% of combined total) for combat aircraft in comparison to $2,599.9 million (26% of combined total) for transport aircraft and $1791.8 million (18% of combined total) for Unmanned Aerial Systems capabilities.[32] For the financial year 2009-10 the RAAF allocated 23,600 flying hours (62% of combined total) to combat aircraft in comparison to 14,550 flying hours (38% of combined total) to transport aircraft.[33]

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[30] Pascall, *The Trillion Dollar Budget: How to Stop the Bankrupting of America*, 104.
[31] Colin Clark, "JSF Costs Rocket 50 Percent," DoD Buzz Online Defense and Acquisition Journal, http://www.dodbuzz.com/2010/03/11/jsf-costs-rocket-50-percent/.
[32] DoD FY 2009 Budget Request Summary Justification, Major Weapons Systems Highlights, 157, http://comptroller.defense.gov/defbudget/fy2009/Summary_Docs/FY2009_Major_Weapons_Systems.pdf. The figures quoted for transport aircraft are slightly inflated because it includes all C130 aircraft, some of which are not flown by the USAF.
[33] 2009-2010 Defence Portfolio Budget Statement, Section 2, 51, http://www.defence.gov.au/budget/09-10/pbs/2009-2010_Defence_PBS_03_department.pdf.

The culture within the three independent air forces being studied tends to create an organizational tendency to focus primarily on air combat capabilities. While some of this tendency is driven by conscious decisions made from within the organization, a great deal of this focus can be explained by the distinct culture permeating modern independent air forces. The two cultural aspects discussed so far in this chapter--tribally based leadership and technological obsession combined with the historical and budgetary aspects, described in chapters one and two--create a strong organizational propensity to focus on independent air force capabilities, which are predominately air combat capabilities. This focus on independent capabilities is not an issue as long the current strategic environment calls for a predominance of fighter and bomber aircraft. It does become an issue though when the strategic environment begins to change and that focus on independent capability begins to make the air force less strategically relevant. What happens when your organizational culture clashes with strategic reality?

Changing Strategic Priorities

When the organizational culture of an institution restricts its ability to react to or understand changes in the external environment, the institution risks becoming less responsive to the evolving conditions. The last time the USAF was unable to match its organizational culture with evolving strategic priorities was during the rise of the Fighter Generals. Even though the RAF and RAAF did not go through such a dramatic change, it is possible to trace within both of those organizations a subtle shift away from the organizational culture of strategic bombing. Each of these organizations faces at the moment a question about another shift in strategic priorities. Is this potential shift causing the organizational anomaly created when an institution's culture does not match the external strategic reality?

Shifting Strategic Priorities

In *The Accidental Guerilla*, David Kilcullen describes how the United States' preeminence in modern conventional capabilities has made it almost suicidal for any nation to oppose it in conventional military operations. He postulates that the most likely result of this military imbalance is a shift

towards unconventional or hybrid warfare.[34] Kilcullen is not alone in his belief, and numerous military commentators have suggested that conventional militaries, as a means of compelling a desired behavior on the part of a national populace, have become obsolete. The reasons for this obsolescence are clear: conventional military forces appear to be unable to defeat a networked insurgency, which combines the information age's distributed communication and rapid learning with the traditional guerilla's invisibility (by being indistinguishable from the populace) and low support needs.[35] Though there is a great deal of literature written on the perceived change in the characteristics of warfare, perhaps the most important aspect of these shifting realities is what the politicians believe have become the priorities. In the US, Secretary of Defense Robert M. Gates believes that greater emphasis should be placed on what he calls "likely" wars. In his view, those would be similar to the conflicts in Iraq and Afghanistan. Secretary Gates also believes there should be a reduced emphasis on preparing for major conventional conflicts with near-peer adversaries.[36]

There is an obvious and often stated rejoinder to the type of statements made by Secretary Gates, and that is, what about China and Iran? There are many who believe that concentrating solely on unconventional conflict would be a mistake and leave the US at risk of being unable to take on a near-peer adversary like China or a significant conventional threat like Iran. Of course, this argument is very popular within the USAF, and to a lesser degree within the RAF and RAAF. General William M. Fraser III, head of Air Combat Command, is an example of one of those air force officers pushing to maintain a conventional focus. General Fraser stated that the Air Force has to be prepared for tomorrow, should the need arise [to fight] a more intense conflict where other capabilities may be needed.[37] Maintaining a focus on conventional capabilities and the associated "hard core" independent capabilities does not

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[34] Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One*, 1-7.
[35] Jamais Cascio, "The End of Conventional War," Institute for Emerging Ethics and Technologies, 6 May 2007, http://ieet.org/index.php/IEET/more/cascio20070506/.
[36] John A. Tirpak, "Rising Risk in the Fighter Force," *Air Force Magazine*, February 2010, 26.
[37] John A. Tirpak, "Rising Risk in the Fighter Force," *Air Force Magazine*, February 2010, 25.

require the air force to adjust its current organizational culture and focus, something that most organizations are desperate to avoid. While this intellectual debate continues over the future of conventional war, air forces need to be careful that they do not fall into the trap of confusing historical relevance with political relevance. No matter how the future becomes history, the simple fact exists that current policy-makers believe that "small wars" are the most likely threat in the immediate future, and to maintain their relevance air forces need to embrace this change of strategic priorities. In 2008 the USAF demonstrated that failing to identify a shift in strategic priorities can be publicly and organizationally damaging.

UAVs versus the F-22

In April 2008, Secretary Gates criticized military leaders for the slow buildup of unmanned aerial vehicles (UAV) patrolling the skies over Iraq and Afghanistan.[38] Significantly, the Secretary chose to deliver the speech to a group of USAF officers at Air University, Maxwell Air Force Base, Alabama. While Gates did not directly blame the USAF for a lack of UAVs, the location of the speech should have been a significant clue as to whom the Secretary thought was responsible. The language Gates used should have also been a sign of the level of frustration he was feeling over the services apparent lack of willingness to adjust strategic priorities. Secretary Gates suggested that "people were stuck in old ways of doing business". He also said "all this may require rethinking long-standing service assumptions and priorities", and finally he suggested that "dissent is a sign of health in an organization, and particularly if it's done in the right way."[39] The writing was on the wall, and Secretary Gates was warning the USAF that it was not meeting his strategic priorities. He believed it was because the organizational culture was too inflexible to change its current focus.

It would be unfair to suggest that the USAF has not realized the importance of UAVs. In February 2005, the then USAF Chief of Staff, General John P. Jumper, told Congress "we're going to tell General Atomics to build

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[38] Michael Hoffman, "Gates puts pressure on call for more UAVs," *Air Force Times*, 22 April 2008, http://www.airforcetimes.com/news/2008/04/airforce_uav_callout_042108/.
[39] Hoffman, "Gates puts pressure on call for more UAVs," *Air Force Times*, 22 April 2008.

every Predator they can possibly build."[40] The reason that Secretary Gates was becoming frustrated was because the USAF was still pushing the importance of air combat roles in the budget battles for the F-22. The reason why the USAF was more interested in the F-22 rather than UAVs stems from a number of factors. Firstly, from an organizational culture perspective, UAVs were not part of the "hard core" capabilities that the air combat "tribe" considered as the core roles of the air force. For a significant period of time they were not considered an important part of air power and were blatantly ignored. The second big cultural problem was they were unmanned. Charles Duhigg explains that "when defense contractors initially talked about UAVs, they advertised them as replacements for fighter pilots. Fighter pilots don't want to be replaced."[41] The move towards unmanned platforms strikes at the very heart of an air force culture that is based on the overriding importance of the pilot.

While these cultural issues explain why the USAF was hesitant to provide UAVs significant priority, they don't fully explain why Secretary Gates was becoming so frustrated with USAF leadership. At the time of the Secretary's speech, the USAF was in a budget battle to maintain funding for the F-22. As discussed previously, when services feel their budget is under threat they tend to push the independent capabilities of their service. In attempting to maintain the desired level of funding for the F-22, the USAF leadership was pushing high-end independent capabilities exactly at the time that Secretary Gates wanted it to focus on low-end joint UAV capabilities.

The result was that on the 5 June 2008 Air Force Secretary, Michael Wynne, and USAF Chief of Staff, General Michael Moseley, resigned their positions. The public reason given for the resignation was the mishandling of nuclear weapons, but as John Barry reports in *Newsweek*, the root cause of the resignations was an increasing tension created by a differing opinion on where the strategic priorities lay. Secretary Gates believed that Iraq and Afghanistan

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[40] Bruce V. Bigelow, "Demand for Predators Soars," *SignonSanDiego.com*, 16 February 2005, http://legacy.signonsandiego.com/news/business/20050216-833-demandfo.html.
[41] Charles Duhigg, "The Pilotless Plane That Only Looks Like Child's Play", *The New York Times*, 15 April 2007, http://query.nytimes.com/gst/fullpage.html?res=9907E2D6133FF936A25757C0A9619C8B63&sec=&spon=&pagewanted=3.

were portents of the kind of conflicts the U.S. was most likely to be involved in over the next generation—"asymmetrical", messy, manpower-intensive. Gates also believed that the USAF leadership was infected with what he calls "next-war-itis"—preparing to fight some future state-vs-state conflict of a more traditional nature, and spending billions of dollars to buy the ultra-high-tech equipment to fight in that conflict.[42] What Secretary Gates had effectively done was raise the price of "shirking". The organizational culture within the USAF combined with an overly independent focus, created budget concerns and generated a situation where the USAF leadership was unable to identify the extent to which it was becoming strategically irrelevant. Perhaps this is an excellent example of where the USAF leadership did not correctly identify the true costs associated with "shirking" on jointness.

Maintaining Relevance

There are other clues which suggest that the air-combat-focused air force culture is beginning to become perceived as less strategically irrelevant. There is a growing pool of literature that suggests that fighter and bomber aircraft are becoming less relevant in today's wars. Lara Dadkah suggests that the Taliban have found a way to defeat American air power because air support to American and Afghan forces has been all but grounded by concerns about civilian casualties. American and NATO military leaders, worried by Taliban propaganda claiming that air strikes have killed an inordinate number of civilians and persuaded by "hearts and minds" enthusiasts that the key to winning the war is the Afghan population's goodwill, have largely relinquished the strategic advantage of American air dominance.[43] While air combat aircraft are being used to protect troops on the ground and to target insurgents when they can be identified, fighters and bombers have a very limited role in the primary goal of counter-insurgency, which is the protection of the local population. In fact, air power is seen as one of the reasons why counter-insurgency forces are losing the support of the local population. General Stanley McChrystal, the Commander of US forces in Afghanistan recently said

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[42] John Barry, "Deplaned: Behind Defense Secretary Gate's Air Force shake-up," *Newsweek*, 6 June 2008, http://www.newsweek.com/id/140276/page/1 .
[43] Lara Dadkah, "Empty Skies over Afghanistan," *New York Times*, 18 February 2010, http://www.nytimes.com/2010/02/18/opinion/18dadkhah.html.

"we need to understand the implications of what we are doing. Air power contains the seeds of our own destruction. A guy with a long-barrel rifle runs into a compound, and we drop a 500-pound bomb on it? ... If we use air power irresponsibly, we can lose this fight."[44]

It is important to remember that these comments are not suggesting that air power cannot be used in counterinsurgency campaigns; they simply indicate that the form of warfare being undertaken makes it difficult to apply effective kinetic force from the air. This makes the air force feel less relevant in the current fight. As discussed in chapter one, there is a desire within independent air forces to do more than simply contribute to the joint fight. The justification cycle is all about being able to do something more than support, because air forces still feel that they have to justify their existence, air power needs to be playing a predominant role in all of the nation's conflicts. In counterinsurgency warfare, this is unlikely to be the case. In *Air power in Small Wars*, James S. Corum and Wray Johnson support this argument by suggesting that it is fundamentally irresponsible to suggest that air power "can go it alone" or be the primary focus of effort in counterinsurgency and counterterrorism.[45]

The relevance of combat aircraft is not the only "sacred cow" being attacked; another core cultural belief being questioned concerns the importance of technology in today's wars. Major Arthur Davis suggests that assets in the US Air Force inventory lack the ability to support ground forces adequately in the prosecution of a counterinsurgent campaign. He recommends that instead of fast, expensive turbojets, the Air Force needs reliable, propeller-driven aircraft designed to work in the environment favored by the insurgent.[46] Thomas Harding, from the UK, suggests that putting fighter pilots in a single engine, turbo-prop aircraft such as the Super Tucano has to be contemplated. Aircraft like the Tucano are cheap, low-tech, and highly effective. They provide surveillance along with an armament of bombs and machine guns and an

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[44] Dexter Filkins, "US Tightens Airstrike Policy in Afghanistan," *New York Times*, 21 June 2009, http://www.nytimes.com/2009/06/22/world/asia/22airstrikes.html.
[45] James S. Corum and Wray R. Johnson, *Air power in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, KA, University Press of Kansas, 2003), 433.
[46] Arthur D. Davis, "Back to the Basics: An Aviation Solution to Counterinsurgent Warfare," (Maxwell AFB, AL: Air Command and Staff College, 2005), 1-2.

ability to loiter overhead for a long time, and they are also easy to maintain.[47] Harding also recognizes that this would be culturally difficult for the RAF, suggesting "it will take courage for someone in the RAF hierarchy to advocate using the Tucano (cost £6 million) over the Eurofighter Typhoon (cost £65 million) but it is the type of thinking now required."[48]

The purpose of providing these examples that question the need for advanced combat aircraft was to demonstrate that there is a growing momentum within the literature postulating that high-tech combat aircraft are becoming less relevant in fighting today's wars. Whether this will remain the case is not an argument that needs to be made in this study. For the purposes of this paper, it is only necessary to reveal the possibility of a shift in strategic priorities and an associated potential reduction in the strategic relevance of the air force. Having demonstrated that such a potential exists, it is now important to analyze what that means in relation to the prevailing organizational culture within independent air forces.

Air forces are suffering from an organizational anomaly which has been created because the institution's cultural "means" no longer match the "ends" required by changing strategic priorities. In *The Icarus Syndrome*, Carl H. Builder suggests that because the USAF narrowed its understanding of air power theory to include only those aspects of air combat capability, it is vulnerable to changes in the strategic environment that place other elements of air power theory in a more dominant role. It is his belief that as the myth of air power decisiveness slowly unravels, the USAF will struggle to find relevance within a changing strategic environment. For Builder, the external environment is partially to blame, but most of the USAF's difficulties stem from internal organizational issues.[49]

The organizational anomaly postulated in this paper can be seen as the logical conclusion of Builder's Icarus Syndrome. Air forces today have reached

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[47] Thomas Harding, "Big Guns Don't Win Today's Wars", *Telegraph.co.uk*, 25 June 2009, http://www.telegraph.co.uk/comment/personal-view/5640426/Big-guns-dont-win-todays-wars.html.
[48] Thomas Harding, "Big Guns Don't Win Today's Wars", *Telegraph.co.uk*, 25 June 2009.
[49] Carl H. Builder, *The Icarus Syndrome: the Role of Air Power Theory in the Evolution and Fate of the US Air Force*, 36.

a point where the organizational culture they created is struggling to maintain strategic relevance. The "means" created by the organizational culture is the maintenance of air superiority and the precise delivery of kinetic ordnance. Unfortunately, those "means" no longer suit the "ends" created by a perceived shift in strategic priorities. As Builder predicted, the result is an institution that appears to be under siege and in disarray. By creating an air force culture whose primary focus was on those roles that would continue to justify their independence, the three air forces have now made it more difficult to maintain strategic relevance. The main question now is do the three independent air forces transform their organizational culture to match the changing strategic priorities, or do they hope that those strategic priorities will come back into line with the current air-combat-focused culture? This question will be revisited in the concluding chapter of this paper.

Summary

One of the main assertions of this study is that independent air forces have the ability to choose. Nowhere is that ability to choose more evident than in the priorities they select for their organizations. This chapter has demonstrated that the organizational culture of independent air forces severely affects the priorities they select. Tribal leadership and a technological obsession create an air force culture which is primarily focused on high-tech air-combat-capability. This in turn creates an air force that is predominately structured and trained for the delivery of kinetic effect. When a concentration on counterinsurgency warfare creates a shift in the strategic focus of policy makers, this focus on the independent aspects of air power can be damaging to the strategic relevance of the air force. When there is a conflict between the air force's air-combat organizational "means" and the new counterinsurgency strategic "ends", an organizational anomaly is created. This anomaly leaves the three independent air forces searching for a solution to a perceived lack of strategic relevance.

Builder suggests that attributing motivations to a person or an institution has great potential for mischief. Motivations are likely to be both more complex and more revealing than either their owner or their observer can admit. There is always more than meets the eye, and yet what does show may

be too much or too little at the same time, depending on the viewpoint.[50] Understanding the reasons why air forces maintain such a narrow focus on the independent aspects of air power suffers from the same level of complexity. The organizational influences described in this chapter should be seen as one of the potential factors which create an independent focus, but the organizational factors can only be fully understood when they are combined with the historical and budgetary influences provided by the previous chapters. Understanding why the USAF, RAF, and RAAF have a tendency to maintain a focus on the independent aspects is a complex web of historical, budgetary, and organizational influences.

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[50] Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, 10.

Chapter 5

Jointness: An Independent Air Force's "Morton's Fork"

There is no dilemma compared with that of the deep-sea diver who hears the message from the ship above, "Come up at once. We are sinking."

Robert Cooper

The focus of this study up until now has been to describe those aspects of history, budgetary processes, and organizational culture that create a focus on the independent aspects of air power. The primary criticism of this independent focus is that it causes air forces to be unwillingly to embrace jointness. It is to that apparent unwillingness to accept jointness that this paper once again turns its attention. In the late 15th century John Morton, then archbishop of Canterbury, created an unpleasant dilemma for subjects of Henry VII in relation to the amount of tax they were to pay. He suggested that if the subject lived in luxury and had clearly spent a lot of money on himself, he obviously had sufficient income to spare for the king. Alternatively, if the subject lived frugally, and showed no sign of being wealthy, he must have substantial savings and could therefore afford to give it to the king. These arguments were the two prongs of "Morton's Fork"; and regardless of whether the subject was rich or poor, he did not have a favorable choice.[1]

A similar unpleasant dilemma seems to exist for independent air forces today. To maintain their strategic relevance in today's wars, independent air forces need to embrace "jointness", but to embrace jointness with too much fervor brings into question the need for an independent air force. Another way of considering this dilemma is to suggest that the leaders of the three independent air forces being studied understand what choices they need to make to enhance their strategic relevance, but the continued focus on the independent aspects of air power stop them from making this choice.

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[1] Encyclopedia Britannica, "Morton's Fork", http://www.britannica.com/EBchecked/topic/393253/Mortons-Fork.

It is important to understand that this dilemma is not another explanation of why there is such a narrow focus on the capabilities that air forces can provide. It is an intentional simplification of the main issues at the heart of the narrow focus being experienced by independent air forces. The dilemma is all about an attempt to achieve balance; air forces are trying to ensure that they maintain an independent reason for being and at the same time integrate enough with the other services to remain relevant in today's wars.

The Cause of the Dilemma

"Up to this time the Army and Navy have been the predominant forces, and no one questioned that supremacy. But there is no reason why the air arm cannot become the predominant power in its relations with surface forces. In examining these relations, we come to the conclusion that the air force is destined to predominate over both land and sea forces; this is because their radius of offensive action is limited in comparison to the vastly greater radius of the air force."[2] This quote from Giulio Douhet's *The Command of the Air*, is a reminder that the theoretical underpinnings of independent air forces were based on an understanding that they could do more than just support the Army and Navy. Chapter one of this paper provided a brief history of the three air forces under study.   It also described the justifications used by each to gain and maintain independence and the effect that constant justification had on air force culture and decision-making processes. What chapter one did not describe though was the theoretical *raison d'être* that drove the early stages of development within independent air forces.

To be able to fully comprehend the relationship between independent air forces and jointness, it is essential to have a basic understanding of the theoretical foundation on which they were formed. Though World War I had demonstrated the utility of aviation in armed conflict, it wasn't until the inter-war years that air power theories began to be published. The nature of these theories is well described by Steve Call in *Selling Air Power*, where he says "air power was born of a dream - those who saw the revolutionary potential of air

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[2] Giulio Douhet, *The Command of the Air*, trans. Dino Ferrari (1942: new imprint, Tuscaloosa, AL: Air Force History and Museums Program, 1998), 29.

power saw themselves as visionaries, prophets who had grasped the ultimate shape of things to come."[3] Early air power theorists were not necessarily united in their visions for military aviation in the future and tended to sit in one of two theoretical camps. In the first camp were theorists such as Douhet and Mitchell who believed in the revolutionary effect of air power. In the other camp were theorists who took a moderate view such as John Slessor and William Sherman.

The revolutionaries were the "true believers" of air power. For them aviation was to become the new way to win wars and would make all other forms of conflict obsolete. Douhet suggests that there is "no comparison between the efficacy of direct and indirect destructive action against the vital resistance of a nation"[4] Douhet firmly believed that future wars would be won by an air arm's direct attack on the enemy's capital city in order to create a moral and material collapse. Douhet recommends the "progressive decrease of land and sea forces, accompanied by a corresponding increase of aerial forces until they are strong enough to conquer command of the air."[5] Mitchell suggests that "the influence of air power on the ability of one nation to impress its will on another in armed contest will be decisive", and that "the development of air power has forced a complete reorganization of all the arrangements for national defense."[6] Mitchell even went so far to suggest that air power could completely replace the Navy in providing the United States' coastal defense. For the true believers, air forces were not about "jointness." They were a new method of warfare that would replace or reduce the importance of all other forms of combat.

The moderates are considered theorists who believed that the true strength of air power could be found in the support that it provided to the other services. Slessor states that "the object…of the air force contingent in the field is to assist and cooperate with the army in the defeat of the enemy's army, and

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[3] Steve Call, *Selling Air Power: Military Aviation and American Popular Culture after World War II* (College Station, TX: Texas A&M University Press, 2009), 18.
[4] Douhet, *The Command of the Air*, trans. Dino Ferrari, 188.
[5] Douhet, *The Command of the Air*, trans. Dino Ferrari, 30.
[6] William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power – Economic and Military* (1925: new imprint, Tuscaloosa, AL: The University of Alabama Press, 2009), 214.

of such air forces as may be co-operating with it."[7] Slessor contends that wars will be won by defeating the enemy's land forces and that the role of the air force is to enable that defeat to occur more swiftly. In *Air Warfare,* William Sherman does not make such a clear statement of support to the other services. An aversion to attacking enemy towns and cities pervades his theory. Sherman suggests that international law will more than likely make the bombardment of cities illegal, and that if that is not the case, the fear of potential reprisals will stop a country for undertaking such attacks.[8] Sherman then goes on to restate the importance of observation and attack aviation, whose primary purpose is to support the land battle. Though more slanted towards a supporting role, even Slessor and Sherman hint towards more independence. Slessor suggests that "the ultimate reduction of the enemy nation may (and very likely will) be undertaken, not by the traditional methods of land invasion, or by the continued assaults upon their armies in the field, but by air measures."[9] Sherman states that "ultimate success will be achieved with greater degree of certainty by a vigorous offensive against the enemy's aircraft and vital centers."[10] For the moderates, the most likely future of air power was with "jointness", but nonetheless, there was a tinge of independent capability in their writings.

The tendency for aviators in the pre-war period was to concentrate on the revolutionary version of air power theory as that appeared to be the best way to justify the creation of an independent air force. While that push for independence was an important factor, it would be selling early air power enthusiasts short not to explain a potential higher calling. Independent air force action was not simply about justifying the need for an air force; it was a way of ensuring that the horrors of World War I were not repeated.

> *Heavily influenced by World War I and its trench warfare*
> *experience where massive armies battered each other for four years*
> *without conclusive results, and where huge battleship navies*
> *mostly sat idly in port or on blockade duty, air power, its*

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[7] John C. Slessor, *Air Power and Armies* (Tuscaloosa, AL: The University of Alabama Press, 2009), 1.

[8] William C. Sherman, *Air Warfare* (reprint edition, Maxwell AFB, AL: Air University Press, 2002), 190-194.

[9] Slessor, *Air Power and Armies*, 4.

[10] Sherman, *Air Warfare*, 29.

> *proponents claimed, could overleap all defenses and strike at the defenseless heart of the enemy nation. Such a blow, according to air power theorists, would be impossible to stop and would quickly paralyze the enemy society, thus delivering the world from the horrors of another prolonged war by bringing quick, relatively painless victory.*

Steve Call

Yes, the air power theorists were wrong, but it is very important to understand that while the push for organizational independence was important, many of the people who theorized about independent action did so because they believed that air power could make a difference in war. They believed that if it was applied correctly, air power could prevent the true horrors of war.

It is very easy to portray the true believers of air power as villains, purposely purveying a false prophecy. Billy Mitchell, Hugh Trenchard, and Arthur "Bomber" Harris are vilified as men who knew that air power could not deliver on its promise and continued to espouse its virtues to support the need for an independent air force. In *Bombing to Win*, Robert A. Pape suggests that the theory of strategic bombing persisted because of the institutional interests of air forces, in particular the maintenance of institutional independence and autonomy.[11] Tammi Davis Biddle suggests that the airmen's arguments "revealed the way in which they interpreted the world around them and in which they sought to promote their own interests."[12] While both Pape and Biddle are probably correct to a degree, they both fail to attribute a certain amount of "true belief" to the advocates of air power. Though the early air power theorists were involved in the struggle for an independent air force, their theory of air power was more than justification. They believed in it and the solutions it could provide. Harold R. Winton suggests that "many airmen believe passionately that air power is a liberating force that can produce tactical, operational, and strategic results quite independently of land formations."[13] Eliot Cohen describes this true belief when he coined the

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[11] Pape, *Bombing to Win: Air Power and Coercion in War*, 327.

[12] Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*, 291.

[13] Harold R. Winton, "An Ambivalent Partnership: US Army and Air Force Perspectives on Air-Ground Operations, 1973-1990," in *The Paths of Heaven: An Evolution of Air power Theory*, ed. Col Philips S. Meilinger (Maxwell AFB, AL, Air University Press, 1997), 399.

"seductiveness of air power." For early air power theorists, it was about more than independence; they were "true believers."[14]

Unfortunately, it has been the true believer's prophecies that independent air forces have been measured against ever since. This is most likely a result of the continued use of the autonomous capabilities of air power to justify the need for an independent air force, or more recently to justify an increasing role for air power in modern warfare. Perhaps if the Slessor and Sherman path of aerial support to the other services had been selected over the lofty ideals of independent action, air forces today would not be trapped within the justification cycle. Independent air forces today struggle with embracing jointness because institutionally they were created to do something more than simply support the joint fight. Historically, the requirement for an independent air force hinged on the promise that air power could deliver an independent solution. There were other arguments that airmen could have used to justify their independence, such as efficiency or cost effectiveness, but the seductive nature of air power's promise kept them from making those arguments. Surely though this is all old news, and air forces should simply be able to get over this issue because nobody really holds them to the promises they made nearly 90 years ago. What about today? Are air forces still held to those lofty promises? Is the air force's independence still being questioned? The answer is "yes."

The need for an independent air force is still being questioned, and those questions are based on the ability of the service to deliver on promises that have been made.

> ....it's time to revisit the 1947 decision to separate the Air Force from the Army. While everyone agrees that the United States military requires air capability, it's less obvious that we need a bureaucratic entity called the United States Air Force. The independent Air Force privileges air power to a degree unsupported by the historical record. This bureaucratic structure has proven to be a continual problem in war fighting, in procurement, and in estimates of the costs of armed conflict. Indeed, it would be wrong to say that the USAF is an idea whose time has passed. Rather, it's a mistake that never should have been made.
>
> Robert Farley

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[14] Eliot Cohen, "The Mystique of US Air Power" *Foreign Affairs* (January/February 1994), http://www.foreignaffairs.com/articles/49442/eliot-a-cohen/the-mystique-of-us-air-power.

Farley goes on to suggest that "if strategic bombing won independence for the Air Force, yet strategic bombing cannot win wars, it's unclear why the Air Force should retain its independence."[15] David Axe states that he is "fed up with unnecessary gold-plated fighter jet programs, the service's impatience with counter-insurgency and its anti-China rhetoric" and proposes "disbanding of the U.S. Air Force. The air service's missions could be folded into the Army, Navy and Marine Corps without any loss in national power."[16] Does the air force take these criticisms seriously? The next example will demonstrate that they do.

In April 2009, Paul Kane wrote an article in the *New York Times* suggesting that the "Air Force should be eliminated, and its personnel and equipment integrated into the Army, Navy and Marine Corps."[17] Kane went on to suggest that "at the moment, the Army, Navy and Marine Corps are at war, but the Air Force is not. This is not the fault of the Air Force: it is simply not structured to be in the fights in Iraq and Afghanistan." USAF Chief of Staff, General Norton Schwartz, answered Kane's criticisms by stating that "today's Air Force brings specific capabilities to the joint fight to defend the homeland, deter aggression, help those in need and defend the freedoms we all enjoy. This resonates with the American people because they recognize the vital importance of Air Force global vigilance, reach and power."[18] While General Schwartz's comments hint at the independent capabilities that the air force provides, the most important aspect of the letter is simply that he wrote it. The fact that the USAF's Chief of Staff considered it necessary to counter the remarks of Kane is proof that the organization is feeling insecure. Having the Chief of Staff respond to an op-ed in this manner is akin to using a sledgehammer to crack an egg.

There is still some expectation that independent air forces are able to do something more than just provide support to the other services. This expectation has been created from within the service through the development

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[15] Farley, "Abolish the Air Force", *American Prospect,* 1 November 2007.
[16] David Axe, "Disband the Air Force", *Military.com*, 23 October 2007, http://www.military.com/features/0,15240,154578,00.html.
[17] Paul Kane, "Up, Up and Out", New York Times, 21 April 2009, http://www.nytimes.com/2009/04/21/opinion/21kane.html?_r=1.
[18] General Norton Schwartz, USAF Chief of Staff, to New York Times, letter, 23 April 2009, http://www.nytimes.com/2009/04/23/opinion/l23airforce.html.

of theories and doctrine in each of the three independent air forces, and externally through the process of the justification cycle. In what can only be described as a very large portion of "comeuppance," the independent air forces are "stuck" with an expectation that they can do more than just support the joint fight.

This expectation would not be an issue if it were not for the increasing realization by independent air forces that their ability to "shirk" on their joint responsibilities was being removed. An increased political focus on the joint aspects of air power has increased the costs of maintaining an independent focus, making "working" a better option than "shirking." This therefore is the independent air force's joint dilemma; to become more relevant they have to become more joint, but becoming more joint would appear to remove the justification for an independent air force. Farley almost summarizes the dilemma when he suggests that "the Air Force is most effective when operating in support of the Army, and least effective when carrying out its own independent air campaign."[19]

The Problem Distilled

In a democratic nation, independent air forces are able to choose to what degree they comply with the direction of the government and joint "chief" of their defense forces. For various historical, budgetary, and organizational reasons the three air forces studied choose to maintain a focus on the independent aspects of air power. This independent focus leads to a perceived unwillingness to embrace jointness. The proposed solution for this perceived lack of jointness is to re-prioritize air force resources away from independent capabilities and focus on those aspects of air power that provide greater support to the joint fight. This solution creates a dilemma for the independent air forces, because it simply places them into the jaws of another criticism: if air forces aren't capable of doing something independently and are simply there in a supporting role, what is the purpose of maintaining an independent air force? A plausible answer to this question requires one to distinguish efficiencies in training and equipping from those in fighting. While fighting jointly with the

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[19] Farley, "Abolish the Air Force", *American Prospect,* 1 November 2007.

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other services appears to be both efficient and effective, advocacy and funding for equipment as well as specialized training are probably done better by the separate services.   For the independent air forces it comes down to a choice between the lesser of two evils. Is it worse to be accused of not being joint, or having the core requirement for your service being questioned? This study proposes that currently the three independent air forces being studied value their independence more than the need to appear joint. Jointness will always be a secondary concern to maintaining independence.

Conclusion

*Criticism may not be agreeable, but it is necessary. It fulfills the
same function as pain in the human body. It calls attention to an
unhealthy state of things.*
<div align="right">Sir Winston Churchill</div>

Making fundamental changes within any military organization will be
extremely challenging and face immense opposition. Within the military there
tends to be two forms of change. They are "perception management" and "true
change". Perception management is the more common form of change within
the military, and it tends to be a reaction to some form of criticism by the
government or senior military leaders. It normally involves making only minor
changes within the organization to create the perception that the criticized
behavior has changed. These changes involve such things as "task forces" to
investigate the criticized behavior, the creation of an increased layer of
bureaucracy to ensure the behavior does not occur again, or the removal of a
scapegoat officer as proof that the situation has been addressed. None of these
actions actually equate to any significant organizational change.   They are
simply a mechanism that military organizations use to deflect criticism. True
change, on the other hand, is about fundamental organizational transformation
and normally involves significant structural and cultural amendments. True
change is extremely rare and tends to occur only when the military service
wants to change or is forced to change.

In *Images of Organization*, Gareth Morgan suggests that organizational
change is best achieved by creating doable high-leverage initiatives that can
trigger a transition.[1] Morgan suggests that the best way to create a change
within an organization is to provide it with the incentives necessary to
undertake the desired transformation. He also suggests that it can be achieved
by focusing on a few key principles that offer the promise of achieving quantum
change incrementally.[2] If the problem for the three air forces being studied is
that they maintain a focus on the independent aspects of air power, the obvious

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[1] Morgan, *Images of Organization,* 260.
[2] Morgan, *Images of Organization,* 261.

questions are, what incentives can be provided to change this focus, and will these incentives treat the cause or the symptom? The answer is: a little bit of both.

To make a true change within the three independent air forces being studied and tackle the lack of willingness to embrace jointness within, both aspects of the joint dilemma will need to be addressed. The air forces will need to address the issue of their concerns over independence and their focus on the autonomous aspects of air power that it creates. Both aspects of the dilemma are so intertwined that attempting to treat one or the other would not have the same effect as attempting to address both of them simultaneously. The potential remedies for the joint dilemma will be discussed in the same three broad areas that the causes of the dilemma were presented: historical influences, budgetary effects, and organizational issues.

Historical Levers

The study of history does not provide a great deal of opportunity to create practical high-leverage initiatives, but that does not diminish the important role that it could play in creating change within the independent air forces. Perhaps one practical lever that the study of history might be able to provide is by widening the available historical literature that is concerned with every aspect of air power. Within the present historical literature there is very little attention paid to the "unglamorous" aspects of air power. The more glamorous parts tend to be those that are directly related to the independent aspects of air power. Much of the historical literature has a definite bent towards the operations of fighters and bombers, leaving out the other important contributions of air power. Unfortunately, the unglamorous aspects of air power draw very little attention from writers because they do not naturally excite the imagination of the potential authors, and perhaps more importantly, the general public does not demonstrate a great deal of interest in the subject. A notable exception to this trend is *The Candy Bombers* by Andrei Cherney, an excellent book that highlights the importance of air transport during the Berlin Airlift. To provide a greater depth in historical literature air forces should consider providing a greater weight of funding towards those authors willing to undertake projects that highlight the importance of every aspect of air power.

Though not particularly practical, perhaps the greatest effect that the study of history could have is by correcting the organization's understanding of air power's role in past conflicts. Though a great deal of historical analysis has focused on the air forces' ability to perform in their independent role, the true value of the study of history can be found by moving away from this independent focus. The most valuable lesson that independent air forces can learn from history is that air power has been at its most effective when it has been applied in the joint role. The propensity to concentrate on arguments about decisiveness has detracted from an improved understanding of the true value of air power. Air forces need to accept history's demonstration that they are most effective as an integral part of the joint fight and that they don't need to be any more decisive than that. A greater organizational understanding of how air power has contributed to the joint fight might at last allow independent air forces to release themselves from the "justification cycle". If the air forces accept that they don't need to be independently decisive to be considered effective and essential in the joint fight, the need to justify an air force through independent action is removed.   A better understanding of history will provide air forces with a greater degree of confidence about their vital role within the joint team.

Budgetary Levers

If the study of history provides for effective change but very little in the way of practical solutions, amendments to budgetary procedures should be considered the potential "big stick of change". As the study has demonstrated, one of the primary concerns for all of the armed services is the maintenance of their funding. Unfortunately, at the moment budgetary procedures do not provide the necessary incentives required for any of the services to make jointness a priority. To differing degrees within each of the countries studied, the current budgetary processes can actually reward services that are politically adept at making their independent projects a political priority. To assist in removing the focus that air forces have on the independent aspects of air power, significant amendments should be made to the method by which funding is allocated in the various departments of defense.

In, "The Evolution of Joint Warfare," Williamson Murray suggests that one of the primary obstacles to jointness is that the services still control the majority of the defense budget.[3] If the services already control the majority of the budget, they are free to pursue their preferred priorities, and there is little or no real incentive to embrace jointness. Though the US, Britain, and Australia have different budgetary systems, there are a number of principles that could be followed to create financial incentives for all of the services to embrace jointness.

The first principle is that the defense budget should be centralized under the management of the joint chief of the defense force. Individual services should not be able to enter into direct political dialogue over their portion of the defense budget. This centralization should hopefully remove some of the aspects of politicization of the budgetary process discussed in this paper, which encourages an independent focus and a movement away from jointness. It is not realistic to expect that such a move would remove politicization completely from the budgetary process, but it would reduce the inherent simplification of budgetary arguments that tend to lead to extreme independent positions. The centralization of the budget would lead to an internalization of the inter-service rivalry over funding, which tends to lead to a lesser degree of independent focus, as demonstrated in the British and Australian systems.

The obvious criticism of the centralization of the budget is that it reduces the political oversight of the budgetary process, and therefore increases Feaver's principal-agent problem. The response to that criticism would be to suggest that the centralization of the process actually makes it more accountable. If the services are able to blame each other for poor financial prioritization it makes accountability more difficult. If the joint chief becomes accountable for the financial actions of the services, the chief is more likely to take an active role in ensuring that they comply with the direction and intent of the government. Centralization will increase accountability.

The centralization of the budgetary process can be enhanced with the introduction of a second principle. That principle is that "all money starts its

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[3] Williamson Murray, "The Evolution of Joint Warfare," *Joint Force Quarterly*, Summer 2002, 36.

life as joint". The defense budget should be considered as a joint budget in which the services only remove a portion that is absolutely necessary for the running the independent aspects of their service. The rest of the budget is allocated to joint activities. Individual services can only receive additional funding only to undertake these joint activities, and only if they can prove that the funding will be spent to enhance joint performance. The purpose of this principle would be to reward joint activity. Each year the joint chief could specify his priorities for joint activities; each of the services could then submit measurable objectives to meet those priorities. The joint chief's appreciation of how well those objectives were met would determine the allocation for the next budgetary cycle. The services would still receive the minimum funding necessary to undertake the raise, train, and sustain portions of their mission, but additional funding could be achieved only by becoming more joint.

Organizational Levers

While the budgetary levers are the most effective method of addressing the independent focus aspect of the joint dilemma, they do not address the second part of the puzzle, air forces' concerns over independence. For this the air forces are going to have to look internally at the organizational culture they have created. At the conceptual level, the air forces are going to have to pull themselves out of the justification cycle. To do this they must let go of the pervasive need to justify their existence. In short, the air forces must be willing to sacrifice their independence to ensure that they maintain it. The air forces need to realize that the only way they are going to lose their independence is if they continue to make themselves strategically irrelevant. The most likely way to do this is to perpetuate the belief that independent air forces are not good joint players. Embracing jointness is more likely to lead to the continuation of independence, not the loss of it.

To achieve this move towards embracing jointness, the three air forces are going to have to remove the institutional focus on the independent aspects of air power. The air forces need to widen their focus and embrace all of the aspects of air power, and return to what Carl H. Builder would consider an overall theory of air power. Morgan suggests that one of the best ways to create

a cultural change within an organization is to create a new cultural metaphor.[4] This metaphor is designed to be the encapsulation of the shared vision and intent of the respective air force. This study suggests that a new cultural metaphor for the independent air forces should become *excellence in every aspect of air power*. The temptation was to shorten the suggestion to "excellence in air power", but to push the all inclusive nature of the cultural change "every aspect" was added.

To anybody with a modicum of military service or experience within a large co-operation, there is a natural skepticism involved in simply changing the "catch cry" of an organization. This act alone means nothing if it is not backed up with practical actions and quality leadership. There are practical actions that the air forces can take to enforce the intent of the new cultural metaphor. A good place to start would be a review of the majority of air force strategic and operational doctrine. At the moment, the majority of this doctrine is worded in such a way to emphasize the independent capabilities of the air force, and in most cases does not appropriately address the overall capabilities that air power brings to the joint fight. The doctrine needs to reflect a change in focus, portraying the independent capabilities that air forces have, as simply one part of the overall capability an air force brings to the fight.

Another way to change the culture of the organization is through leadership. A message needs to be transmitted through all levels of air force command that independent capabilities are not the only focus of the air force. The leadership needs to demonstrate that it has no tolerance for officers who do not subscribe to the wider understanding of air power. Individuals who make extreme statements about the independent capabilities of air power should be castigated, not supported. There is definitely room for individual service pride and a certain degree of inter-service rivalry, but inflammatory terms such as "decisive" need to be removed from the air forces' vernacular. The air forces need to demonstrate this commitment to every aspect of air power by ensuring that the leadership from within the air force comes from a wide selection of air force capability. It might be too much to suggest that these leaders do not necessarily have to be aircrew, but at the very minimum they should represent

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[4] Morgan, *Images of Organization,* 138.

a broader community from within the air force. All of these actions are designed to widen the focus within the air forces away from concentrating on the independent aspects of air power. By providing a wider understanding of air power and being able to tailor that to the current strategic situation, it is hoped that future dysfunction can be avoided by reducing the potential of becoming strategically irrelevant.

As with any suggested course of action, there are a number of risks involved in re-focusing the air force away from independent capabilities. The first is that the baby will be thrown out with the bathwater. There is a very real possibility that the organization could overreact to this re-focusing and ignore those essential elements of air power that are considered independent capabilities. The ability to "reach out and touch" the enemy and the importance of air superiority will remain critical roles within the air force. Any re-focusing undertaken needs to recognize the value of all aspects of air power and avoid simply reducing the value of anything considered too independent. The second risk is that if the air forces set themselves up as being able to provide "excellence in all aspects of air power," the other services are going to hold them to that mantra. The simple truth is that the air forces will never have enough resources to satisfy the needs of the other services. So this change of focus will need to be clearly communicated to the other services and the government. This re-focus will not necessarily increase the amount of support that the other services receive in every aspect of air power, it will still be important for the joint chief to provide prioritization of effort. The air forces' part of this bargain will be to respond to that prioritization, even if it reduces the resources being allocated towards independent capability. If you are going to market yourself as being more joint, you have to be able to deliver on that promise.

The importance of air power to the joint fight will always remain. Unfortunately, and to the regret of many airmen, air forces may have to be satisfied at times with playing a supporting rather than leading role. Accepting this fact and communicating this belief to the other services will go a long way to reduce the perception that air forces do not embrace jointness. This attitude in no way reflects a belief that the need for an air force is reduced; it simply places the emphasis on the effectiveness of every aspect of air power. Air power

will remain an essential part of joint warfare. It won't always dominate, and it may not be decisive, but more importantly, it doesn't have to be.

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